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ABSTRACT

This document contains papers presented at the 1971 conference of the International Council on Education for Teaching (ICET), Kingston, Jamaica; particular emphasis is on the territorial regions in the Western Hemisphere. Topics include crises and change in teacher education, cultural changes and educational change, teacher education and urban development, approaches to educational reform in Latin America, and teacher education in the contemporary Caribbean. (JB)

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CRISIS AND CHANGE in TEACHER EDUCATION

International Perspectives on Theory and Practice

INTERNATIONAL COUNCIL ON EDUCATION FOR TEACHING
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From the President's Pen

The reward for careful planning of an international conference was seen in the meetings held in Kingston, Jamaica, both at the University of the West Indies and at the Kingston Sheraton Hotel, which were organized by ICET. The planning had taken place a long time before but must never be forgotten as a major contributing factor to the remarkable success of our Conference.

In Kingston we were lucky to have Aubrey Phillips, our own Executive Member, on the staff of the University of the West Indies and serving on the Jamaica Teachers Association Research Committee for the World Assembly meetings of ICET and WCOTP. What was achieved in planning in Kingston was brilliantly executed by Frank Klassen and John Collier. The sheer weight of numbers enrolled for the ICET World Assembly through the planning of the AACTE Officials was itself a guarantee of success.

That ICET has arrived and has important things to offer in the international educational scene is now clear to all. This is understood by politicians, by teachers, and by teacher educators. We were honored to have sustained collaboration from The Right Honorable Hugh Shearer PC, the Prime Minister of Jamaica, and His Excellency The Peruvian Ambassador, who participated in many sessions. The planning, organization, and execution of our program on "Crisis and Change in Teacher Education" was supported by UNESCO, and notably by Vladimir Hercik of the Department of School and Higher Education. The Jamaican Teachers Association, through Fay Saunders, their President; the AACTE in the person of Nathaniel Evers, President, and Edward Pomeroy, Executive Director; and the Organization of American States through Francisco Cespedes, the Director of Educational Affairs, were in such general support of the ICET program that it would be a professional solecism not to mention them. The texts of the main addresses are contained in the following pages. They cover an immense range in the treatment of Crises and Challenges, with particular emphasis on the immense territorial regions in the Western Hemisphere. The support for the whole exercise that came from the Americas and the Caribbean was so impressive that an excellent foundation has been laid for sustained progress in further thematic treatment of problems in teacher education.

One of the most successful sessions was a question and answer period where the participating membership of some 250 found opportunities to address their special questions to one of the more distinguished teams of experience and intellect ever assembled at a world conference on teacher education.

It was a great honor to be associated with this most successful activity; it was a vote of supreme confidence in the continuing generous support of the American Association of Colleges for Teacher Education, its officials and its officers; and it was, I hope, the most happy augury for continuing success for the World Assembly in London in July 1972.

DAVID J. JOHNSTON
President

ICET: Premises and Priorities

FRANK H. KLASSEN
Executive Director, International Council on Education for Teaching

The alterations in the twentieth century social fabric have been radical. The shock of new technologies, new social patterns, new interdependencies among men and nations have created the need for a new conception of society in which education for teaching, research and service will play an integral role. The new society is, in essence, a world society; one that incorporates in its definition the global context within which modern man thinks and acts. To assist in the development and diffusion of such a conception of society, the International Council on Education for Teaching has set itself two broad goals.

Building a World Community in Teacher Education

The first goal is to assist in the creation of those conditions and opportunities that will foster the growth of a global teacher education community as a constituent member of the emerging world society. The community concept requires the existence, first, of a commonality of interests and wide consensus regarding objectives within the group. Equally significant, however, is the need to recognize the reality of differences and uniqueness. Finally, the concept suggests the need for efficient mechanisms to enable the community to reach agreement on priorities among its common aspirations, strategies for achieving these priorities, an equitable distribution of the duties and rewards involved in joint endeavors while permitting the continuous search for alternatives that reflect differing points of view and creative forays into the future.

A world teacher education community should exhibit these characteristics. There is, indeed, much that is common to all the world's teacher education systems resulting from the universal goal of preparing teachers and other educational personnel of the highest possible quality. To protect children from the ignorance of their teachers is to state this objective in its most negative terms. More positively, to provide teachers capable of stimulating and extending the intellectual, emotional and physical development of the younger generation so that it may become productive and socially responsible is a universal task. Subsumed under this overriding goal are a wide variety of approaches, conditions and levels in the preparation of teachers in the various countries and cultures of the world. Because of this worldwide mixture of similarities and differences in all aspects of teacher education, it is quite possible that qualitative improvement can be brought about through the cross-cultural exchange of advice, example and research.

Diffusion of Innovative Practices

The notion of cross-cultural exchange suggests a second broad goal for ICET, which is reflected in a very direct way in the substance of this volume, *Crisis and Change in Teacher Education.* The scope and vision of the Council is not limited to teacher education in isolation; there is a continual obligation to strive to tap the vast reservoir of intellectual talent represented by the world's educational community for the resolution of the crises which confront education and society in general. The list of crises is endless. Biologists, psychologists, sociologists, economists and many other specialists claim credit for alerting the world to the imminent threats to human existence and the quality of life from overpopulation, environmental destruction, generational conflict, personal alienation, international enmity, and the accelerating, disorienting pace of modern life. Parents, politicians and social critics at large point to the inability of schools, teachers and institutions that train teachers to devise efficient methods for teaching basic skills and/or advanced concepts fundamental to educational and social growth. Educators, for their part, decry the paucity of resources allocated to the educational sector and the impotence of the traditional systems of education in contrast to other functional systems in society. The stimulus resulting from our contemporary crises for educational improvement, based on valid experimentation and the application of sound research, is without a doubt the most pressing concern of modern educators.

Yet, the dissemination and utilization of useful research, emphasizing practical and exemplary educational techniques tested over time and in a variety of milieux, are woefully deficient. Recent studies in the United States indicate, for example, that the information sources most frequently utilized by teachers as they attempt to initiate

change are other colleagues, administrators in the schools, contacts at local professional meetings and subject matter specialists. Investigation of this phenomenon in other nations would probably confirm the generalization: that without greater attention to the utilization of research through a process of dissemination and diffusion leading to implementation and subsequent evaluation, much of the current research effort may be regarded as futile. In this regard, ICET plans through its regional meetings and workshops, world assemblies, and other means of communication to give increasing attention to the problem of identification and dissemination of innovative practices which have been proven useful through research in a variety of different situations.

Representation in ICET

To achieve these goals several strategies are now under consideration. All are based on the premise, as stated in the 1968 World Assembly Report, that ICET is and will continue to be *representative* of institutions, organizations and individuals whose purpose is the constant pursuit of excellence in teacher education. Its function, as a council, is therefore stimulative and facilitative, employing those methods and conducting those evaluative operations which support national efforts, encourage a more widespread use of innovative practices and planning, and assess the impact on the qualitative improvement of the profession.

The strengthening of its representative status requires strong links among the world's national groups devoted to teacher education and effective channels of communication between ICET and these national groups. At the present time, national organizations that represent teacher education are, however, relatively few in number. There are even fewer regional organizations devoted primarily to teacher education. Some national teachers organizations do have significant components representing teacher education and where such incorporation reflects close functional relationships between higher education institutions that prepare teachers and the school systems which employ their graduates, this is all to the good. But whatever shape the local organization takes, the notion of first developing such organizational entities and secondly, relating these effectively to ICET, is an important strategy. Educators desiring information about national organizations currently in existence may acquire it from the Council's headquarters.

A second strategy, to be considered at length at the forthcoming ICET World Assembly in London, concerns the decision making process, with specific reference to the structure and organization of the Council, through which the functions and tasks of ICET are determined and implemented. The Council has undergone several reorganizations in its nineteen years of existance. In general, its organizational pattern has been the product of interested individuals and the strong support of the national teacher education organizations in the United States and the United Kingdom. Constraints of time and financial support have militated against a continuous program of development and the encouragement of wider national involvement in the affairs of ICET.

In 1968 the first permanent secretariat was created thus providing some continuity of organization and program development. Membership growth has been considerable and currently members are located in some 45 countries. The London World Assembly will consider how this membership might be more adequately represented in the various executive positions and committees, with particular emphasis on more equitable representation by national bodies of teacher education.

Finally, as a private, international body it is important that ICET possess a strong representative voice on behalf of the world's teacher education community in the councils of other international agencies. In 1971, ICET acquired Consultative Status with UNESCO and has, with its support, been able to undertake a variety of activities highlighting the achievements of teacher education in various parts of the world in cooperation with several other international organizations, including the Organization of American States.

The encouragement of the development of national bodies representing teacher education, the restructuring of ICET's organization to provide a more representative vehicle for decision making and the development of an authoritative voice for teacher education in international councils are not ends in themselves. They are designed, in the last analysis, to liberate teacher education from the narrow views and parochial tendencies characteristic of previous ages and to enable it to move boldly into the seventies, meeting the crises of our age with a confidence born of past achievement and a dedication to improving itself commensurate with the significant role higher education and the teaching profession play in the modern world.

Crisis and Change in Teacher Education

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The Malaise in Teacher Education

The word "crisis" comes from the greek *Krino*, a judge, and the dictionary defines it as a moment when decisions have to be taken and, therefore, wise judgment had better be displayed. In this sense, we certainly face a crisis in education and particularly in teacher education. Citizens in general express dissatisfaction with the way schools and colleges are doing their job and teachers are harsh about the performance of colleges of education. There is a feeling that urgent social problems are being neglected, and that much of what is being taught is irrelevant, that the aims and objectives pursued are as out of date as the methods of teaching used. Teachers criticize pupils and pupils, teachers. Parents criticize both. All of them criticize administrators. In fact, there is a widespread malaise. This situation differs radically from that in public health and medicine, where the professional practitioners are increasingly revered and rewarded.

The knights of old defended a rural peasantry against visible brigands and ruffians. The doctors today defend an industrial proletariat against invisible foes: microbes and viruses. Both knights and doctors were and are looked up to; they enjoy high social prestige. We, the teachers, should defend mankind against ignorance, prejudice, passion and social disease. Have we done our job as evidently well as doctors have theirs? Could we have succeeded better than we have?

This public reaction to our partial failure is, of course, exaggerated. It springs in part from disappointment. A generation ago, the wildest and most exaggerated hopes were pinned to the expansion of education: universal literacy in the new countries and universal secondary education in older lands would bring plenty to all and peace to the whole world. Increasing effort, more and more money, were devoted to education, but things did not improve fast enough and not nearly to the degree hoped for. Nor could they have.

There is, however, some justification for the disillusionment. Policies and practices in education have not changed nearly as fast as they should have. The fault certainly does not lie solely with teachers, professors or administrators. Parents and the public are certainly more conservative and reactionary than are the professionals. They would, and do, reject strongly and decisively much that the latter would recommend and welcome. It is typical of men and women everywhere that they accept willingly, even eagerly, changes in methods of using, producing, exchanging or distributing material goods from cars to frozen vegetables. But they reject as immoral and undesirable changes in social, cultural or moral attitudes, standards or habits. There, of course, is the trouble with us educators: to be successful, it is precisely these attitudes, standards and habits we have to change. Medical men, on the other hand, simply improve the drugs and physiological techniques they use, and everybody applauds and rewards. Unless, of course, the medicos start getting involved with birth control or abortion problems, which have to do with moral habits and standards.

Teacher Education and Changing Social Forces

Nevertheless, it must be admitted that there have been major changes during the last thirty years which have deeply affected the nature of the tasks faced by the educational systems of the world and which have not been sufficiently taken into account in the framing of new educational policies. These changes have been so much described and discussed that there is no need now to go once again over well trodden paths. It will suffice simply to mention the chief changes and to point out how each has or should affect the nature of teacher education.

(i) *The population explosion* together with the explosion of aspirations led to an unprecedented expansion of education all over the world. The demand for teachers increased in consequence and it was met by establishing new colleges of education and by increasing the size of existing colleges. But patterns of teacher education did not change significantly. A boom in demand does not encourage either re-tooling or the introduction of really novel designs. It is when times get hard for producers that deep and drastic changes have the best chance of being introduced.

There has also, of course, been an explosion of knowledge. This has had practically no effect on teacher education apart from external superficialities like bringing in courses on audio-visual methods or "computers-in-schools" or on pollution control: all valuable in their way, but in no way fundamental innovations. But in universities the effect has been marked, chiefly through the creation of a multitude of new departments and specializations. A side effect on our own field has been a developing faith in the virtues of specialization, a faith which has had some unfortunate results because it led to restrictive narrowing and to the introduction of sterile courses of study on this and that, which were wrongly thought to be in contact with "fruitful" research (e.g., in connection with reading; numbers; sociology; psychology).

(ii) *Urbanization:* The new methods of producing foodstuffs and appliances have led to a massive movement from the country to the town and then to a migration of the better-off sections of the population from the centers of town to their suburban peripheries. Hence the problems created by urbanization and by the changed social composition of urban schools.

Our elementary schools, the tradition of which dates back to the late 18th and early 19th centuries, were originally designed as institutions intended to adapt rural youth to a factory system and to the disciplines of urban life. Our teacher education practices, too, date back to the same period and conditions. Since then, inner content has changed a great deal. Can we be certain that the framework, the skeleton of the structure, has really changed? Does it need transformation?

A supplementary question may here be added; in many parts of the world these town schools are now provided in villages. They are maintained and organized by governments, themselves deeply committed to urbanized-factory-money conditions as distinguished from rural-primary-subsistence conditions. Planned by city-dwellers, staffed by teachers who are lovers of towns, these schools are seldom in community institutions. They may prove destructive of rural patterns of life which many think worthy of preservation. They may indeed, quite often, be foreign institutions producing inflammation and disorder in the communities they are intended to serve.

The question here, then, is: what changes in teacher education are needed to provide educators equipped to deal with the new problems in schools serving the communities which now exist, namely, the city centers, the suburbs and the rural communities *as they now are?*

(iii) *The Rise of Educational Technology*

During the present century, the methods of organizing work in factories and the technologies applied have been transformed so drastically that some speak of a new industrial revolution. There have been parallel changes in the distribution and dissemination of knowledge and information, particularly at the level of mass communication. Speech and visual presentations can now be recorded, stored, transmitted and made available to large numbers of people easily and inexpensively. The equipment at the disposal of teachers not long ago was restricted to talk, chalk, books, a few models, and sometimes a workshop. It is now vastly increased in range and complexity and includes, for example, television, video-tape, film-strip, learning machines and language laboratories.

So far, in schools, the effect on the content of curriculum and on methods of teaching has been minimal. Little has been done to explore ways of genuinely using visual methods to educate children and young people. At the level of teacher education, little more has been done than to add to the ordinary courses one or two on "Audio-Visual Methods."

Furthermore, there has been much research capable of being applied to teaching, just as there has been on methods of producing material goods and mechanical appliances. But schools have proved more conservative than factories and offices. We now know much more than we did about the way in which the young develop and learn, what difficulties they encounter when mastering the art of reading, and how they should be taught about number and space. But here again, colleges of education, which ideally should be mediating institutions linking research laboratories to classroom workshops, have not fully lived up to their responsibilities. To be sure, as was said earlier, courses have been added and the content of old courses somewhat changed. But a more drastic reformation is called for. What is needed is a new outlook, a frank adoption of the modern technological outlook with its process control, quality control and product control; we need a change from "how to teach others" to "learning about learning."

(iv) *Growth of Specialization*

Basic to modern modes of production is far reaching specialization and the division of labor pushed to an extreme limit. Starting from refined metals, half a dozen skilled workers could build a model-T Ford in the early years of the century. How many kinds of specialists are needed to design and build the 1972 models built in the vast factories of today's world?

So, too, in education and teaching. Not so long ago a teacher was a teacher, at least at the elementary level. He could turn his mind and his hand to every job that needed doing. With equal assurance and confidence, he taught reading to infants or history to young adolescents. He proferred advice and counselling at all levels, and even to parents. When promoted, he administered the affairs of a school or of a school board, keeping the books and designing a new building when needed. "And still the wonder grew, that one small head could carry all he knew..."

At the secondary level, of course, the notion of specialization was to some degree accepted. The all-purpose teacher-of-all-work could not be expected to teach science or mathematics to clever sixteen or seventeen year olds; he would not know enough about the subject matter. But this exception made many feel somewhat uncomfortable: specialist teachers were looked upon somewhat as of a breed apart, not quite up to the level of their colleagues. This attitude is not altogether dead even now in many countries; quite often teachers of physical education, home economics, art, industrial arts, commercial subjects are looked upon as somewhat inferior. They may even be awarded "special" certificates qualifying them only to teach their own subjects, while their colleagues who have specialized say in history or mathematics receive "general certificates" empowering them to teach anything to anybody.

However, it is possible to point to certain major trends in the larger society. First, institutions concerned with teacher education can no longer concentrate only on classroom and subject teachers for primary and secondary schools, A wide range of specialists are called for: counsellors, teachers of exceptional children, teachers of art, home economics, music and, in addition, administrators, planners, school psychologists, librarians and many others. In fact, more specialists are required than any one single institution can possibly provide. This is an argument for planning at state, provincial and even federal levels. Secondly, every institution concerned with teacher education must devote an ever increasing proportion of its resources to the permanent education of all teachers and administrators, to their in-service training and re-training.

To all this, another reflection, perhaps the most important, should be added. The rapid obsolescence of industrial techniques arises from the fact that scientific research has been built into the production itself. As a result, change, novelty and improvement is now an intrinsic part of that process. In the eighteenth century, a Wedgwood could plan his factories in the confident belief that the same kinds of goods would be produced for generations. Now, two hundred years later, manufacturers of aircraft or computers know that if they go on making the same kind of machines for more than a few years, they will go bankrupt. They realize that research and development are essential to prosperity.

This, however, is not true in education. Many, perhaps most, departments or colleges of education seem to assume that they have done what they should do if they hand on to students the knowledge and skills of the previous generation. Only seldom does one come across an institution that is truly research dominated and dedicated to innovation.

An illustration may make the point clear. Consider a sub-department which specializes on the methods of teaching mathematics or foreign languages. Can such a unit do the job it should if it is not itself actively engaged in research and curriculum improvement? Should not its students be oriented towards the improvement of learning and the modernization of content? Should they not be brought into contact with the fact that much new work is being done and novel ideas are being applied in practice? The adoption of an attitude of this kind is almost certainly more to be desired than the endless multiplication of recondite and scholastic research or quasi-research leading to the award of ever more numerous Ph.D.'s. It is certainly closer in spirit to the kind of activity that goes on in medical and scientific laboratories both in universities and industry.

Teachers for the Year 2000

We shall succeed in implanting new ideas and models into teacher education only if we alter radically our whole attitude to the nature and structure of formal education.

The new outlook, itself shaped by the nature and structure of modern society, unites two main and complementary notions:

1. First, the notion that the school be brought closely and continuously into contact with life as it is. This will involve diminishing the bureaucratic organization of its activities; reversing the trend to concentrate all education within the walls of the school; breaking up rigid patterns of classroom organization and division by age; making full use of all the resources which the community provides; and involving parents and citizens in the business of educating the young. In a word, the de-institutionalization of the school is necessary.

2. Secondly, the explicit and thorough acceptance of the ideal of permanent life-long, continuing education. That is, we should now put into practice the notion that education is not an affair that begins at 5 or 6 or 7 and ends at 14, 15, 18 or 22 years of age. There is no reason why formal full-time schooling should go on steadily, without a break, until the most successful students receive a degree. It may be better for many to leave early, at 14 or 15, to work in the field or in the factory and then to return at 18 or 20 for a year or two, and to return again later, up to any age. It may be more efficient for many to pursue their studies part time, in the evening or during vacations. The ideal of permanent education has, of course, special importance in teacher education.

It is no part of the purpose of this paper to suggest and propose specific models for teacher education throughout the world. The diversity is too great. The differences in culture and tradition, in administrative forms and in political organization, in economic development and wealth, in social and educational development are so great that, happily, no single pattern could possibly suit every nation and area. Nevertheless, similar forces are at work everywhere, similar problems arise and it seems probable that criteria of evaluation could be proposed that would have universal significance and relevance. It should not be impossible to state some of these criteria as they would apply to the kind of "teachers" needed, to the sort of courses and programs that would help to produce such teachers, and to the kinds of institutions in which such programs could be offered.

First, the teachers. Of course, the old criteria still apply. We need mature, stable, well-balanced men and women, with a broad general education, with some enthusiasm for their profession and faith in what it might do for the welfare of mankind. In addition, they should be competent at their professional job, able to teach, to transmit knowledge, to develop skills. But what is new?

(i) the teaching profession is becoming differentiated, as is the medical profession. It seems likely that before long there will be an open hierarchy: teaching assistants, teachers, master teachers. Moreover, special skills are increasingly called for: educational administrators, superintendents, consultants and inspectors, school psychologists, counsellors, teachers of exceptional children, school librarians, and so on. Furthermore, the problems of teaching in the primary school are not identical with those of the secondary school.

(ii) not all teachers, but certainly some, need special preparation for teaching in the decaying centers of old cities, in the shanty towns, and in rural areas.

(iii) all teachers need to be aware of the great importance of devising courses and programs in schools that will help to control intransigent nationalism and racism, and that will foster individual self-reliance while developing the sentiment of social responsibility.

(iv) all teachers must now learn how to participate actively in group teaching and how to function happily in continuous progress, non-graded schools.

(v) all teachers must now realize that what they learn in university and college is only a beginning and that teacher-education is a life-long process, involving servicing and re-training all through professional life.

These five points will probably be readily accepted by all. Let us examine then the question of the sort of teacher education program that would be helpful in educating teachers for the times ahead:

(i) if the idea of permanent education is fully accepted, if it is realized that all teachers will come back again and again to the colleges for refreshment, there is no need to cram into the initial training courses everything that might conceivably be needed during a long career. A modest amount of professional baggage should suffice: just enough to prevent bad habits from developing. How long would be needed for this? Three months or six or twelve?

(ii) the minimum skills required are best developed in a classroom rather than a lecture room. Therefore work in a school should play a large part in the initial professional programs. But the model should be that of learning in a laboratory rather than imitating in a workshop.

(iii) a rich diversity of courses should be offered, allowing, so to speak, pre-specialization.

(iv) general education is even more important than it was. But such general education is not the outcome of taking six or ten different courses in this or that. General education is concerned with ideas and theories. It does not aim at professional competence in narrow segments. Combining narrow segments does not provide a rounded whole.

(v) what students learn from one another may be more important than what they learn in lectures, even in regard to developing professional competence. Intending teachers must not be educated in isolation wards. They must learn to think that the whole community is a resource for the educator.

Here again, few will object to these criteria for the evaluation of programs, though many will surely wish to extend the list.

Turning to the structure of the institutions which concern themselves with the professional education of teachers, it is clear that they fall into three categories:

(i) *Normal Schools* which combine general secondary education with preliminary professional education for elementary schools. In low-income countries they continue to render valiant service and act as agencies promoting social mobility and selecting talent. As the output of general secondary schools increases, the age of admission into normal schools rises and they turn gradually into teachers' colleges, themselves para-university institutions.

(ii) *Teachers' Colleges* or *Colleges of Education* which enroll students who have completed a full secondary education. Often these students are lower in academic ability than those selected by universities and the courses provided may be shorter; two years or three years, instead of three or four years. The chief drawback to these institutions is that they tend to be monotechnic, concentrating on one single type of professional preparation. Teachers' colleges are clearly temporary institutions and will not long survive. As they are, they are unable to undertake satisfactorily the kind of activities or to discharge the professional responsibilities outlined earlier in this paper. They must *either* (a) associate with other monotechnics such as colleges of physical education, colleges of agriculture, or colleges of technology and include a general junior college. That is, they should develop into undergraduate state colleges. This is what has happened in many parts of the United States. Or, as in the United Kingdom, they can federate with the departments of education of existing universities and, as a federation, become the school of education of the university.

(iii) *Schools* or *Faculties of Education*, themselves constituent parts of full-blown universities, dealing not only with the initial preparation of many types of teachers and of associated professionals such as administrators and counsellors, but also actively engaged in research and with the preparation of students taking higher degrees.

Whatever the type of administrative organization, general guidelines for the functioning of colleges of education may be stated:

(i) there should be two lines of recruitment into the teaching profession, one at the end of secondary school, for those who decide early on their future vocation; and one for those who decide to teach only after taking their first bachelor's degree. It is wrong to force young people to decide earlier than they must what their future profession will be.

(ii) initial courses of specific training for the teaching profession should be as short as it is possible to make them. All that is needed is to develop a degree of skill that will prevent beginners from doing harm to their pupils, and to provide them with enough knowledge to prevent them from getting into bad habits.

These initial courses should center attention on actual problems of teaching and they may well concentrate chiefly on particular aspects, such as the teaching of mathematics or the teaching of exceptional children. Most of the work should be connected with internship. There is small need for structured courses on, for example, psychology or sociology of education. Such courses belong to stage two of teacher education.

(iii) attention must be paid, even at the initial level, not only to the preparation of class teachers but also to the preparation of other educational workers such as librarians, counsellors, school psychologists, social workers, and so on.

(iv) all the students should receive some acquaintance with the technology of education, a term which includes skill in using modern electronic apparatus and also some understanding of modern knowledge about the nature of the processes of communication, learning and teaching.

(v) all teacher education institutions must develop links with the whole network of educational resources in their own communities *and* with sister institutions in other countries.

(vi) an increasing proportion of resources must be devoted to the development of in-service teacher training.

(vii) bold experimentation should be encouraged so that new patterns of teacher preparation may be discovered and tested. Licensing regulations should be drawn up sufficiently broadly so as not to stand in the way of such experimentation. The State or Government Licensing and Certification authorities should issue only General Certificates of Competence at various levels, endorsed with the special courses pursued. The schools of education must themselves decide upon the kind of programs pursued by the students and upon the content of the courses. The teaching profession is now mature enough to take into its own hands, as has the medical profession, the control of its affairs and to determine the courses and standards that will allow entry into its ranks. There is no further need for bureaucratic control by public officials, which can act only as an impediment to the achievement of accepted aims of policy.

Conclusion

There is good reason to think that in every province or state, area or country there should be established an Institute of Education charged with the duties of fostering cooperation among all teacher education institutions and of allocating tasks and responsibilities among them. Even big universities now lack the resources necessary to prepare adequately all the many kinds of educational specialists needed, or to provide the many kinds of theoretical courses, from anthropology of education through comparative education to educational planning, that ought to be provided. Furthermore, a regional institute can promote research projects that are beyond the resources of single departments. But there is a great temptation to which such Institutes are exposed, which is to attach too much value to long-range theoretical research and to sever all links with initial training and with the work done in schools. A national or state institute must be integrated into the ordinary educational system just as the research and development department of an industry forms part of the self-renewing mechanism of that industry. It should itself be part of the rolling reform of educational systems and practices.

As regards the nature of teacher education institutions, it has been suggested here that they should broaden their aims and offerings to become, in effect, polytechnical schools, of full university level, dealing particularly with a whole range of occupations concerned with the social and educational services, including journalism and the mass media. The institutions should, so it was suggested, offer programs of a general kind and be impregnated throughout with a real research outlook; that is, the teaching should aim at being up to the frontiers of knowledge and inspired by the desire to advance them. As regards the development of specific skills, such as the ability to teach reading to young children, the programs should be modest in scope and rely heavily on internship methods.

Behind all this were quite simple, straightforward notions. For example, public education should be a social instrument for improving the lot of mankind, but it cannot be unless it truly concerns itself and deals with the problems that mankind faces. Or again, among other things our teacher education institutions must rid themselves of their traditional trade-school temper and become centers of ideas. In the present world of change and tension, teachers have a vital role to play. In order to discharge it fully, they need a rich and full education - and it must be available to them all through life.

A final word. It is the great glory of our profession that it is worldwide. Similar ideals animate teachers everywhere, in every country and culture. There is much in common between educators in Japan and in America, in China and in Europe, in India and in Africa, in the Soviet Union and in Britain. We can learn much from one another because we are all trying sincerely to do the same kind of job and because we all believe that, through education, the world of the future can be made better than the world of today.

It is the faith that makes me think that meetings such as those sponsored by ICET are so important and so hopeful, and that makes me so proud of having been given the opportunity and the privilege of sharing my ideas with you.

Teacher Education and Urban Development

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"Urban development" is one of those terms which in popular usage embodies a mass of confusing and difficult definitional problems. In this it has something in common with other terms that frequently find employ in educational circles such as compensatory education and equality of opportunity. The latter has had a good going over by philosophers and sociologists who have exposed its ambiguity and range of possible interpretations. There have also been attempts to clarify the notion of compensatory education; Burke (1969) suggests that it means "special educational provisions or adaptions designed specifically to overcome learning difficulties or handicaps in school associated with poverty, class, status, nationality, race, cultural background, home conditions or adverse environmental conditions generally, as distinguished from organic causes."

When you get down to the kinds of structures, programs and reforms that would be necessary to enhance equality of opportunity and to increase the amount and the effectiveness of compensatory education, it soon becomes clear that these terms mean very different things to different people. Urban development is in the same class of concepts and acquires even greater difficulties when linked with particular kinds of educational provision. In general such discussions focus upon educational deficiencies and educational disadvantage.

The Dominant Culture and the Sub-Cultures: The Educator's Dilemma

Take, for example, the following statement from a well known study (Mays, 1962) of educational provision in a poorer part of the City of Liverpool:

> The general task presented by all the problems of the Crown Street District involves a thorough-going re-deployment and extension of the social services in a concerted program. If the quality of social life is to be altered in such a way that the existing set of cultural norms is to be gradually replaced by another set more in line with those of the wider society, special priority must be given to the needs of this area for a number of years. Concentrated and sustained effort rather than piecemeal patching is called for. Clearly the schools by themselves cannot achieve such a complete transformation. All the resources of the community must be brought to bear on the problem. But education in its widest meaning of the word is the community's strongest available instrument for changing attitudes and outlooks.

The importance of a concerted attack upon problems of urban re-development, and the need to recognize that vital as its role may be, education cannot itself cure the disease of our urban environment are likely to secure general agreement. But note the way in which Professor Mays uses the terms *cultural norms*. These, he suggests, must gradually be replaced by another set more in line with those of the wider society. But what is the character of this wider society? Is it to be defined by the existing values of the middle classes?

This, of course, reflects one of the central problems of those who write about the relationships of education and society. Educators recognize that the value and significance of what goes on in schools and colleges and universities should not be, must not be, reckoned in accordance with the social origins or occupational destinations of students. Market forces and the cash nexus provide no criteria by which we may measure the worth of the third grade child's poem, the slow learner's halting attempts to read, the nervous, unathletic boy's first home run, or the adolescent's struggle towards emotional maturity. Coupled with this is an awareness that, as things are, the scales are weighted from the start in favor of the child from the advantaged home, and that the underprivileged family measures the quality of the education its children receive by the extent to which social mobility is made possible. As David Lewis (1969) has reminded us:

> The empty bellied migrant from the land moves to the city in search of employment for himself, but for his children he is in search of education, the fulfilment of the twentieth century city dream, in which each of his sons will be an urban professional, a lawyer, a doctor, an engineer, a politician or a university professor.

The urban underprivileged, as numerous surveys testify, view education in largely instrumental terms (Schools Council 1968). The educator is trapped. He wants to provide an education that is valid in its own terms, that provides life enhancing experiences, opportunities for personal growth, a proper sense of individual and group achievement. He perceives that some of the values represented in the life style of the urban disadvantaged are by no means morally inferior to those of the middle classes, but that to "succeed" in the terms dictated by a stratified, status conscious society may involve substantial losses not only for those who correspondingly "fail" but for the successful themselves. At the same time he knows that the effect of providing the kind of education that is more relevant to the personal and cultural needs and immediate interests of the majority of students is to deprive them of the opportunity to compete for the rewards and privileges characteristic of advanced technological societies. He knows, too, that these awards and privileges arise from the operation of a system which, for all its faults and dysfunctions, had made possible longer life, less burdensome work, greater leisure, and a wider choice of goods, services and styles of living for more people than at any other time in history.

In struggling with these dilemmas, educators have at one time or another embraced doctrines of intelligence which seem to provide a morally neutral legitimation for the kinds of selection, rejection and allocation that the system requires. They have also tried to provide a "separate but equal" kind of secondary education for the so-called non-academic child, as in the abortive attempt to create a distinctive niche for the English secondary modern school between 1945 and 1965. They have participated in campaigns to stress the social importance and individual dignity attached to manual and technical occupations, as in many parts of Africa today. Others have underwritten the attempts of governments to create and to obtain status for a large-scale, non-university sector of higher education in the shape of community colleges, Polytechnics, *Instituts de Technology* and a dozen other forms that are appearing in advanced countries, as well as designed programs of compensatory education and endeavored to enlist community resources in the improvement of both rural and urban educational provision in developing and developed countries alike. All these efforts have reflected a variety of educational assumptions which are associated with more or less coherent and well articulated social and political theories.

Educational Assumptions and Urban Programs

My colleague Eric Hoyle has recently attempted to categorize these theories along two dimensions: conservative-radical and nomothetic-idiographic (Hoyle 1969). Nomothetic radicals look mainly to empirical analysis and systematic description as the basis for structural change, piecemeal reform and the improvement of educational opportunity. Idiographic radicals also want change, but they are less concerned with structure than with content and curriculum and are responsive to literary rather than scientific modes of analysis, to the intuitive and the cultural rather than the statistical and sociological, to a holistic rather than a piecemeal approach to reform.

Both brands of conservative theory embody a skeptical attitude to the advantages of change. Educationists who espouse a nomothetic conservative position see the need for arrangements whereby the able sons and daughters of the underprivileged may have a route to the top and tend to support what Michael Young has called a *meritocracy*. They testify to the merits of the traditional academic curriculum, but have rather little to say about the kind of education that is appropriate to the academically less able.

The idiographic conservatives share the idiographic radicals' literary, cultural and intuitive modes of analysis, but derive rather different conclusions. Their concern is with the preservation of high culture and the maintenance of standards. They argue that an academic, literary and scientific curriculum is unsuitable for the needs and interests of the majority of pupils, who should instead be given a more practical, realistic and vocationally oriented diet.

Such a categorization as this is suggestive rather than definitive, but it does show how pronouncements on such topics as curriculum change, compensatory education and the place of education in urban development can be examined in terms of the assumptions that they embody about man and society. The neglect of such examination has accounted for some strange educational alliances, which if they satisfy the need for conference consensus, often fail to stand up to the tests of implementation and action.

To follow the categories suggested by Hoyle, both conservatives and radicals are interested in the possibilities of urban development, if for rather different motives. For those of the one persuasion, it is an essential step in the removal of gross material and cultural inequalities, in the equalization of opportunity, in the achievement of the good society. For those of the other, it reduces the threat to civil order and to property that is posed by the existence of ghetto conditions and by the attitudes that are bred in the slums, and it frees the inhabitants of the city to take their full part in the operations of a market economy. Idiographic radicals and idiographic conservatives alike look for solutions to urban problems less in terms of piecemeal structural reform than in changes in the minds of men. A statement of Lewis Mumford's (1968) about the future of California sums up the approach that I have in mind:

> ...no serious improvements are possible in the old terms. if we want to improve the regional environment, we must also improve ourselves, that is, we must change our minds and alter our objectives, advancing from a money economy to a life economy; in many matters we must acquire new values, new sensitivities, new interests, new goals that will ensure a self-sustaining, many sided life. That life must not depend as it so largely does now upon our constantly dancing attendance upon the machine, and pursuing only such activities as will give the makers of machines and machine products the maximum market for their goods.

In contrast, nomothetic conservatives and nomothetic radicals share a faith in the possibilities of using new technologies to help counter and master the negative influences of the old, just as killed viruses are used to provide immunity against infection. Traffic congestion, exhaust pollution and accidents? The answers include new pedestrian-free roads, vehicle-free walkways, stricter control of automobile design, and better road safety training. Overcrowding, housing shortages, abortion and illegitimacy? Let us examine the possibilities of new contraceptive technologies, plug in accommodation modules, and the planned development of new towns. Rebellious pupils, alienated students, dissatisfied teachers? We must improve instructional technologies, reduce class sizes, upgrade teachers' statuses and salaries, reform the curriculum, and so on.

There is no simple way of deciding whether nomothetic or idiographic strategies are likely to be most effective as a basis for urban development; since our criteria of effectiveness themselves depend upon our overall theoretical perspective, this isn't something on which it would be easy to reach agreement. But the categorization that I have attempted may help in reviewing the extent to which the value structure that underlies teacher education is congruent with that which sustains the processes of urban development.

Urban Development and Values in Teacher Education

As far as I know, there have been relatively few attempts to analyze the value structure of teacher education. The field is a vast one. In the United Kingdom alone there are nearly 200 teacher preparing institutions, employing some 8,000 staff, amongst whom a wide variety of opinion on almost every social and educational issue must be represented. Nonetheless, the colleges and departments of education can be recognized to have a distinctive image, a set of characteristics which are recognized by staff and students alike, and which play a major part in sustaining the opinions and stereotypes that exist about them. I have elsewhere tried to describe and account for the value structure of teacher education (Taylor 1969). This analysis is based largely on United Kingdom data, but I suspect that it may apply more widely.

The value structure of teacher education represents a response to a number of related historical and social influences. The teacher occupies an ambiguous position both in community and in society. He has traditionally been expected to act as an examplar of moral virtue, to help in "gentling the masses" and at the same time to renounce any claim to the higher rewards and status to which his education might otherwise entitle him. In more recent times, with the opening up of the channels of society mobility, he has acted as guardian of elite membership but without the right of personal entry to the elite. With the extension of education to wider groups of the population, teachers have had to face the problem of giving meaning and significance to the education of the majority of individuals who are unlikely to "succeed" in the terms dictated by the kind of society in which we live. The institutions in which teachers are trained have in many countries been uncertainly poised between the world of the school and of the university, belonging to neither, vulnerable to criticism from both. Where teacher preparation has

been absorbed into the universities, it retains something of the intellectual inferiority that dogged the former normal schools and training colleges. Insofar as they are concerned with the education and training of teachers for the primary schools, teacher educators have been responsible for disseminating an individualistic, child rather than subject centered orientation, and have been critical of the claims of academic formalism.

These are among the influences that account for the value structure of teacher education. That structure embodies a partial rejection of the pluralism of values associated with conditions of advanced industrialization and a nostalgic fondness for the simpler virtues of the rural community. There is a certain suspicion of the intellect and the intellectual; the word 'academic' often has pejorative associations in teacher education circles. There is little interest in the possibilities of political and structural change. In most countries, student teachers have played little part in student militancy and are largely conformist and apolitical. Attitudes are encouraged which stress the possibility of finding personal autonomy through the arts, the importance of community and small group relationships, and the limitations of a purely rational analysis of the problems of man and of society. There is a stress upon service and responsibility. The therapeutic and counselling role of the teacher is given prominence.

The system of values that I have described is in process of change. There is a strong tide of opinion against single-purpose teacher preparing institutions and 'concurrent' courses which combine academic and professional training and require students to make a commitment to teaching at point of entry into post secondary education. There is a less obvious but influential current of opinion against identifying teacher education too closely with the university sector of higher education in a favor of closer links with the Polytechnics and advanced further education sector. The claims of residence in respect of professional socialization have been challenged and the socializing role of the colleges and departments of education played down in favor of a more instrumental, technical responsibility designed to give the future teacher the knowledge, skills and competencies that he will need in the flexible learning environments of tomorrow rather than the classrooms of yesterday and today. In the light of this movement of opinion it is of interest to note that in the United States, where the *de jure* single purpose teacher preparing institution has practically disappeared, there has recently been a resurgence of concern for a larger measure of professional commitment on the part of teachers and for forms of education and training that foster such commitment.

Accepting for the moment that the system of values that I have tried to describe is unlikely completely to disappear within the next few years, but that it is weakening in the face of a more instrumental, role-specific approach to the task of teacher preparation, how does all this fit into the problems of urban development?

The logical approach to answering this question is quite straightforward. We first of all have to define what we mean by urban development and identify the part that the schools can and should play in the process. J.B. Mays, from whom I have already quoted, produced one of the earliest statements of this kind, listing the provision of new and better equipped schools, the recruitment of more specialist and technical teachers, the development of strong operational links between school and home using more positive techniques for securing parental cooperation, the elimination of wastage of talent and ability, the provision of an adequate youth service and the establishment of further education for all young people with a strong vocational bias. At about the same time J.B. Conant was writing his *Slums and Suburbs*, and in the ten years since there has been a spate of books and of reports of action projects, which between them provide an impressive array of experience and technique on the educational task to be undertaken as part of the development process. Given all this, we can presumably categorize the kinds of skills, knowledge and attitudes that are needed by teachers who are to carry out this task. In the words of a recent collection of papers devoted to this topic:

> "Prepared early in his training, the neophyte teacher should be able to cast aside the behavioural concomitants of the crusader, the missionary and the benevolent paternalistic coloniser and to become instead the expert instructor in a particular field, sensitive to his own and to his student's cultural needs (Zeitz 1969).

There have also been a number of attempts to define the kind of education that teachers coping with urban conditions require, such as that of Hillson and Purcell (1969). In the United Kingdom, several colleges of education have developed interesting initial training courses for students preparing to work in urban schools, particularly in areas with substantial proportions of immigrant pupils, and sometimes in collaboration

with action projects undertaken as part of the Educational Priority Areas (EPA) program.

Whether the problem is that of community breakdown in the urban area, or primitive agricultural methods in the developing nation, or family failure in the prosperous suburb, recent years have seen a shift away from externally imposed remedies and solutions, towards an approach designed to help individuals and groups to learn to help themselves. Interventionist strategies are being evaluated more in terms of their positive multiplier effects than with respect to their immediate pay-offs. Education has thus become the key variable in efforts to promote economic, societal and community development. But it is often a very different kind of education from that which we have traditionally recognized as being embodied in the activities of schools and teachers and examination boards. It seeks, first and foremost, to identify and to enlist the existing educational resources of the community. It starts from where people are, and tries to construct its goals and objectives in terms of existing perspectives, rather than imposing standards and aims from without. It places a maximum value upon the fullest participation, at each stage and at all levels, of those it is designed to help. (In this respect, a recent report on participation in planning the United Kingdom [Skeffington Report 1969] shows how far we have to go. Public meetings called to discuss planning proposals were shown to attract as few as 1 in 10,000 [in one case 1 in 100,000] of those affected by the plan). It recognizes that the availability of new technologies will do little to solve problems unless they are congruent with existing or emergent community values and attitudes.

To anyone who has been associated with the work of primary schools in England, a great deal of this seems very familiar. Substitute "the child" for "the community" in the previous paragraph, and you have a statement that has a great deal in common with the efforts that have been made over the past thirty years or so to reform the schools for pre-adolescents. Little wonder that some American commentators see these schools as constituting a model for developments elsewhere. Although pleased to provide such a model, some of us wonder if it is as readily exportable as some overseas enthusiasts seem to think. Nor would we have you think that every child's friendly neighborhood primary school is open plan, family grouped, integrated day, unlock-stepped, creativity oriented and child centered. It is not. But a growing number are, and the model is recognized as legitimate by a large proportion of primary stage teachers and by all the establishments that prepare teachers for work at this stage.

The attractions of such a model to those who want to see change in the schools and to those who are concerned with other kinds of development activity are obvious enough. It is on a human scale. It is educationally autonomous in a way that is impossible at other stages, for social origins and occupational destination are irrelevant in determining the worth of the child's performance. It recognizes the diversity and richness of human differences without resort to the classifications and categorizations that secondary and post secondary education impose: academic and non-academic, 'A' stream and 'C' stream, college and vocational, physics *and* chemistry, physics *with* chemistry and (for those who despair of science and of whom science teachers despair) general science. The basis of its groupings, family, neighborhood, friendship, are natural rather than the artificial ability range, strict chronological age, and subject aptitude. Little wonder then that the model appeals, and that it seems relevant to the kinds of things in which the specialist in urban development is interested.

The Academic, the Vocational and the Problem of Opportunity

If the common factor in a large number of development programs is learning for self help, does our secondary and post secondary education sufficiently provide for this kind of learning, and are our teachers trained to foster such learning in their students? Educational radicals in many countries answer this question with an emphatic negative. Some typical criticisms have recently been voiced in the report of a Ford Foundation supported Task Force under the chairmanship of Frank Newman of Stanford University (Newman 1971). Newman and his colleagues share the interest of the Carnegie Commission in the two year Community Colleges which are now such an important element in the American educational scene. But Newman is critical of the way in which the two year institutions are developing as screening mechanisms for the four year college:

> Academic leaders in the four year colleges and universities see them as buffers which will allow their institutions to preserve their "academic integrity" and

concentrate on what they like best. High School officials see them as institutions which can relieve high schools of the burden of preparing students for meaningful careers. The public sees them as fulfilling a major social commitment to educational opportunities for all - without realizing that the majority of college students never complete their courses of study.

Instead, Newman and his colleagues would like to see the two year colleges developing in a more diverse way and with new patterns of "educational missions." As an example they quote with approval the work of the College for Human Services in New York, which has the following characteristics:

> The students are from low-income families and are typically 10 to 15 years older than the normal college age. About half do not have a high school diploma. They are selected primarily on the basis of motivation. The curriculum is organized around the professional skills to be learned, includes work experience, is shortened to 2 years, and concentrates on learning to serve the community. Traditional subjects do not appear as courses in the traditional disciplines but as responses to needs developed by the students as they progress. The faculty and staff are an amalgam of graduates of traditional colleges and graduates of the College for Human Services, supplemented by faculty from surrounding institutions and professionals from the community. The agencies at which the students work are drawn into the training and become part-time educational institutions. In addition to utilizing a new educational format, the college constitutes an alternative path to a professional career.

All this sounds very much like arguments that arise from time to time in the United Kingdom concerning the inefficiency and uselessness of conventional academic education, the need for greater social and vocational relevance, and the importance of closer links with the so-called (it seems a doubtful claim) "real" world of business, commerce and industry. But, whilst experiments of the kind to which the Newman Report refers are to be welcomed, caution is needed to ensure that such programs do not have the effect of limiting opportunity, sustaining existing social divisions and denying the possibility of a genuine academic education to those who might profit from it. It is a difficult business to save short-cycle higher education from the twin dangers of, on the one hand, becoming a mere appendage of existing long-cycle courses and institutions, and, on the other, of being "end-stopped" and providing only terminal opportunities for its students.

It has been, is and will probably remain too easy for the educational system and the efforts of educators to be required to act as surrogates for the kinds of social and economic change that are really needed if the problems of higher education, the problems of equal educational opportunity and the problems of the city are to be overcome. This is why the work of the schools and colleges and teachers must be seen as an element in a *concerted* attack by a variety of social agencies, and also why the teaching and learning tasks that are crucial to the success of such an attack must not be left entirely to the schools, the colleges and the teachers. For as we have seen, if urban development is to succeed, then learning is involved of a kind that extends beyond the activities that are currently legitimized within the institutionalized world of education.

Idealism and Realism in Urban Education

But a recognition of the limited part that formal educational provision can play in the development process and a willingness to grant the important educational role of other social and community agencies, needs to be balanced by a clear appraisal of the contribution that *can* be made by the teachers. Without such a balance, it is all too easy to create a feeling among the neophyte and the experienced practitioners alike that little can be done in the classroom to offset the effects of incompetent parents, bad homes and a disintegrating community life. Sociologists and psychologists have bent their efforts to disentangling the complex relationships of family, peer group, neighborhood, school and teaching influences upon educability and performance. No one could pretend to sum up the outcome of those efforts in a single generalization. Yet teachers, like the rest of us, have some kind of image of the direction in which the evidence seems to point; and it is images of this kind, not careful abstracts of research outcomes, that permeate the recipe knowledge that guides our practice and features so prominently in everyday conversation in teachers' lounge, staff room and conference hall.

Unfair as it may be to Plowden (Central Advisory Council 1967) in the United

Kingdom, to Coleman (1966) in the United States, and to a dozen more major research studies here and elsewhere, popularization may have fostered an ideology of environmental determinism every bit as rigid and as damaging to teaching efforts as the hereditary determinism that preceded it.* Too many teachers seem to believe that the effects of schooling and the results of their own efforts in the classroom are not significant elements in the child's environmental experience. Such a simplistic reading of the contribution of school and teaching to the explanation of educability and performance serves a number of useful functions. It furnishes the teacher with moral support in situations in which an awareness of failure and personal deficiency can be very strong. It justifies (properly enough) greater efforts on the part of society to remedy the grosser environmental handicaps to learning. It gives both radical and conservative critics of the schools, the academic fundamentalists and the de-schoolers alike, ammunition for their campaigns.

Yet such a reading is simplistic, and seriously underestimates the part that teachers and teacher preparing institutions can play in raising individual standards of performance, establishing new cognitive and non-cognitive group norms, and contributing to the process of urban development. Social class, IQ, peer group and family influences, the organizational structure of the school, teachers' expectations, teacher behavior, students' self concepts, educational aspirations and academic performance relate to each other in ways that are complex and as yet only partially understood. In the form in which it is isolated for measurement, each of these factors is already the result of a multitude of prior interactions drawn from the social and psychological repertoire of a given cultural and historical setting. This repertoire is always changing: new kinds of interaction appear and the contents and significance of what we call 'social class' or 'teacher espectations' or 'academic performance' are correspondingly modified. Even if existing studies entitled us to draw the conclusion that teacher and school variables are of little importance in determining educational outcomes (and research such as that by Himmelweit and Swift [1969] shows that no such conclusion would be justified) we retain responsibility for devising ways in which teachers' efforts and school organization can make more potent and effective contributions to the achievement of educational and social objectives.

If the validity, or at least the suggestiveness, of the preceding analysis is accepted, we are left with a number of major problems in attempting to prepare teachers to face situations of urban crisis and to play their part in the processes of urban development. Some of these can be stated fairly straightforwardly, even if they are very hard to resolve. For example, what kinds of experience of neighborhood and community life are most useful in the course of preparation for teaching? How can we best help the future teacher to know which social agencies he can most profitably call upon in dealing with specific difficulties? Given the instrumental educational concerns of most city dwelling parents, how can we ensure that the teacher is adequately informed and competent in his particular fields of knowledge and skill? How do we best go about the by no means new task of giving the teacher confidence in operating within the particular pattern of social control that is appropriate to the tasks of the urban school? What kinds of curriculum are best adapted to induce a sense of pupil concern and responsibility on matters of ethnic, religious and social conflict? How do we counter the temptation for the neophyte teacher to fall back upon well-established custodial routines in the face of the ambiguities and trauma characteristic of school life in some urban areas?

These are only a few of the questions that teacher educators seek to answer in their organization of course structure and content. But there are other questions which if they do not present themselves on a day to day basis, are of even greater importance in relation to the part that teacher education can play in urban development. They concern issues of cultural identity and assimilation, the nature of the teacher's professional commitment and the structure of teaching as an occupation.

I have already referred to some of the theories and assumptions that are relevant to the first of these issues. They link with the second when we begin to ask questions about the extent to which the teacher's success in coping with urban crisis requires, in addition to relevant knowledge and skills, a measure of just that kind of commitment characteristic of the crusader and the missionary. If such a commitment is required, how can it be encouraged without returning to the nineteenth century idea that financial, intellectual and social affluence makes the teacher unfitted or unwilling, or both, to sympathize with and to combat the problems of the poor? Few would now sympathize

*See comments of John Figueroa on this point, page 47.

with earlier assertions to this effect. Yet it remains true that rather few of the best qualified, most experienced and professionally most competent teachers are to be found working in the most difficult urban schools and fewer still living within communities that these schools serve. I do not think that we are likely to find answers to these problems until we are willing to take a radical look at the structure of teaching as an occupation and to produce a pattern of salaries, conditions of service, opportunities for in-service education and professional advancement that make it no longer necessary for the dedicated classroom teacher to get out in order to get on.

There is no single, once for all solution to the problems of the city; our apocalyptically inclined visionaries, who have answers to most things, have in this case mostly turned their backs and left. Teacher educators do not hold the key. But if we recognize the need for a balance between structural reforms on the one hand and changes in the minds of men on the other, between personal commitment and an appropriate pattern of rewards and statuses, between demands for relevant practical skills and high levels of personal education, between the accumulated wisdom embodied in the academic curriculum and the contemporary need for new maps of learning, and if we manage to design and implement our programs accordingly, we shall at least have made our modest contribution to the educational task that is so fundamental to the resolution of the urban crisis.

REFERENCES

BURKE, A.J. (1969) "Dimensions of need for educational programs for the culturally deprived" in Johns, R.L., Alexander, K. and Rossmiller, R. *Dimensions of educational need;* Gainesville, Florida. National Educational Finance Project, Volume 1.

CENTRAL ADVISORY COMMITTEE ON EDUCATION (ENGLAND) 1967, *Children and their primary schools;* London, Her Majesty's Stationery Office.

COLEMAN, J.S. (1966) *Equality of educational opportunity;* Washington, D.C. U.S. Department of Health Education and Welfare, Office of Education.

HILLSON, M. and PURCELL, F.P. (1969) "A master's degree in urban education and total mobilization of resources for change" in Tuckman, B.W. and O'Brien, J.L. *Preparing to teach the disadvantaged;* New York, Collier Macmillan.

HIMMELWEIT, H.R. and SWIFT, B. (1969) "A model for the understanding of school as a socialising agent" in Mussen, P., Langer, J., and Covington, M. *Trends and issues in developmental psychology;* New York, Holt, Rinehard and Winston.

HOYLE, E. (1969) "Social theories of education in contemporary Britain." Paper presented to the annual meeting of the British Sociological Association.

KERR, C. *et al* (1970) Carnegie Commission on Higher Education *The open door colleges: policies for the community colleges;* New York, McGraw Hill.

LEWIS, D. (1969) "New urban structures" in Baier, K. and Rescher, N. *Values and the future;* New York, The Free Press.

MAYS, J.B. (1962) *Education and the urban child;* Liverpool University Press.

MUMFORD, L. (1968) *The urban prospect;* London, Secker and Warburg.

NEWMAN, F. *et al* (1971) *Report on higher education;* Washington, U.S. Department of Health, Education and Welfare, Office of Education.

SCHOOLS COUNCIL (1968) Survey No. 1 *Young school leavers;* London, HMSO.

SKEFFINGTON REPORT (1969) *People and planning;* London, HMSO.

TAYLOR, W. (1969) *Society and the education of teachers;* London, Faber & Faber.

TAYLOR, W. (1971) Seventh conference of European Ministers of Education, *Policy and planning in post secondary education;* Strasbourg, Council of Europe.

ZEITZ, L. (1969) "An anthropological view of poverty" in Tuckman, B.W. and O'Brien, J.L. *Preparing to teach the disadvantaged;* New York, Collier Macmillan.

Cultural Crises and Educational Change

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The concept of crisis is essentially bound to the concept of change. An economic, social, political or educational system is in crisis when it is no longer able to fulfill its final purposes and when, in order to survive, it faces the need of radical changes. Social, political and economic systems result from preceding crises of ideologies and ideas. When philosophical and scientific concepts no longer explain, in a meaningful manner, facts and processes of reality, a crisis occurs because men are demanding deeper and radically different interpretations of the nature and destiny of man and society. Historical evidence reveals the functional dependence that exists between political, legal, economic, social, military and educational action and organization on the one hand, and theological, philosophical and scientific ideas on the other.

In the ancient world the theocracies of Egypt, Assyria-Chaldea, Persia, the Inca and Aztec Empires and the Empire of China organized their economy, their social life and their systems of government as a function of their conceptions of the world, their philosophies of existence and their religious beliefs. The Greek culture, which originated systematic-logical thinking, psychology, ethics, law and experimental science, developed a political and economic system that put into effect the ideals of individual freedom, at least for some. Rome copied and enlarged Greek ideas and systems in the field of political structure, military and educational activities. Guided by a very practical and realistic approach and outlook, they invented the Roman system of law which has had a decisive influence in Western culture.

The medieval philosophical systems of St. Augustine, St. Thomas Aquinas and Suarez accomplished a solid ideological integration of the Judeo-Christian theology and ethics with the political and social ideals and structures of the Greeks and the Romans. The results of this colossal effort were applied through the educational activities of the Church which enabled Western culture to be based on a unitary and universal philosophy. But new ideas appeared during the Renaissance in Europe as a consequence of the crisis of religious institutions, of closer contacts with the East and of the development of the sciences. These momentous changes resulted in a philosophical revolution that culminated in the great systems of modern philosophy, beginning with the critical and experimental approaches of Descartes, Kant, Spinoza, Leibnitz, Bacon, Berkeley, Hume and Locke. These ideological and philosophical changes gave birth to political processes that broke the unity of the medieval world through the emergence of modern science and the liberal and representative political systems.

Contemporary culture maintains, with numerous contradictions, the ancient theocratical outlook, the Greek political philosophy, Roman law, the unitary vision of history and philosophy, and the modern sciences; all of them are alive and full of force in contemporary culture. In the Western world there is an inner tension between the attitude of pragmatism and a social philosophy inspired in the Christian values of love and generosity. In the socialist world inner contradictions exist between the ideals of social justice and the implications and shortcomings of totalitarianism. Within the framework of this modern cultural crisis, educators become perplexed when they have to decide the content of various curricula since it is extremely difficult to decide "What to teach." There is at this time no universally accepted agreement on the answer to the ancient question, "What is knowledge?"

Sciences seem to advance in an organized manner, in spite of competing and contradictory philosophical interpretations. Yet, while human knowledge today has the answers for the basic physical needs of man and society, human groups are not yet willing to cooperate in the dissemination of this knowledge, nor in the construction of systems to distribute resources to meet the needs of man. The gap between development and underdevelopment is growing larger and deeper. It is even reasonable to question if it is possible to transfer or transmit science, technology and know-how, in order to overcome that "knowledge gap" between developed and underdeveloped regions and countries.

In spite of such uncertainties, we know that some things are wrong, such as the use of education and educational institutions for political indoctrination. Only a few years ago we observed with astonishment some leading countries of the world using education as political indoctrination in such an aggressive way that it resulted in universally condemned atrocities. Secondly, encyclopedism, in its attempt to substitute rote learning for knowledge, leads individuals and countries to situations of underdevelopment since, not knowing how to think, they cannot originate creative knowledge and work that transforms their condition. Instrumentalism and pragmatism, in its attempt to replace physical instrumental actions for knowledge, makes impossible an intellectual understanding of reality, the habit of critical thinking and a unitary vision of human experience and reality.

There are, however, a number of developments which augur well for the future. For example, the use of psychology and communication research, as auxiliaries of teaching, has significantly improved the process of learning. The correlation of education's efforts at elementary, secondary, intermediate and university levels to community needs has contributed to the economic, social, cultural and political development of communities and to the increased relevance of the educational systems. Finally, the further education of people involved in the teaching profession by using natural and human sciences will enable education to meet the challenge of deciding intelligently and objectively "what" and "how" to teach. It should be remembered that the present tensions and conflicts in contemporary culture are at least partially the result of failures to transfer knowledge, or at least the awareness of the different kinds of knowledge in existence. Through the application of the best methods and conceptual approaches by means of in-service teacher training, human knowledge and experience will become effectively transferred, helping to bring about required structural changes in society, and to overcome the gaps of knowledge, technology, and social and political development which constitute in themselves main sources of conflict.

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News of Teacher Education in India

ICET cooperated with the Indian Association of Teacher Educators (IATE) to sponsor the First Asian Conference on Teacher Education held in Bangalore, India in June, 1971. Speakers and other participants from India, Thailand, Malaysia, the Philippines and the United States explored the relationships between teacher education and modernization, particularly within the Indian milieu. The publication resulting from the conference, *Teacher Education and Social Change*, is available from the ICET Secretariat at a cost of $1.50 (U.S.). Resolutions passed at the conference recommended that a similar one be held every two years in different parts of Asia and that ICET take steps "to organize an Asian Council on Teacher Education to coordinate the activities of national organization and promote the cause of teacher education in cooperation." The ICET Executive Committee is expected to formulate policies in response to this request when it meets during the 1972 World Assembly in London in July.

The World of Today and the Challenges to Teacher Education

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As man articulates his individual and collective aspirations within the contexts of society and culture, education becomes a matter of enormous concern. Whenever a serious problem jeopardizes one's hopes, whether it has to do with personal, national, or international relations, someone is almost certain to insist that "education is the cure." There is almost universal agreement that education is a good thing if we can get the right kind and the right amount. It is not strange that at this juncture in the twentieth century people everywhere seem preoccupied with the viability, efficacy, integrity, and legitimacy of educational institutions which many thought, and some still do, had solutions to the debilitating problems of poverty, racism, injustice, ignorance. It was only a matter of time, money, proper programs, massive assaults, intellectual rigor, participatory democracy, and eventually all of our problems would be solved.

Yet, if one reads anything from the comic strip "Peanuts" to the numerous books and journals about education or schooling, it is impossible to escape the excoriating criticisms of education. The scope and depth of our disillusionment is enormous. It is appropriate and necessary that we identify and examine the specific targets of criticism. Education is always predicated on some presuppositions. These presuppositions must be sorted out, clearly articulated, and critically assessed. Our purposes need scrutiny as well. We need desperately to move toward clarity and some general agreement concerning the aims of our schools. Many educational programs tend to identify differences in students, legitimatize the differences, and reinforce the differences. Our processes sometimes abort our goals. Our rhetoric speaks of participatory democracy, freedom of choice, individualized instruction, involvement in decision making processes. Practice suggests these "are more honored in the breach than in the observance."

The criticisms of educational personnel are sometimes vitriolic. Although many evidence a profound dedication and professional commitment, others seem to care less and less about more and more. To some, bureaucratic maintenance is more important than the services to be performed. Our products–students–have become our severest critics. The poor and the affluent have accused us of being irrelevant, educating for conformity, security oriented, and without compassion or commitment. An education worth its salt should increase the individual's prospects and options. It is reported that Max Lerner was once asked to summarize the genius of democracy in a single word. His response was, "Access!" The present opportunity structure, at least in the United States, denies many groups of persons access, which is significantly influenced by geography, social class, ethnicity, and sex. Fantini and Weinstein in their recent book, *Toward Humanistic Education*, suggest that "the present crisis in education with regard to the poor minority group children is holding up a mirror to the total educational structure for us to make a critical assessment of all the assumptions we have made about teaching and about learning."

The Challenges to Teacher Educators

The identification and clarification of perspectives have been problems ever since man became man. This requires some sense of history, some notions about the nature and the directions of our times. Explanation and interpretation of phenomena predicated on rational processes but devoid of historical input are precarious, to say the least. Our perspectives, profoundly influenced by culture, society, ethnicity, and idiosyncracies, delineate perceptions of the nature of the world and man's prospects and place in it.

I consider this ambitious undertaking an inescapable responsibility of educational personnel, and especially teacher educators. The world is next door. Ours is an age of "forced propinquity." We have been thrown together before we utilized the opportunity to "get fit to live with." Understanding the perspectives, values, life-styles, languages, feelings, or institutional behaviors of others is no longer a matter of sentimental etiquette; it involves our ethics and sensitivities of the highest order. Separation and insensitivity are luxuries we can no longer afford.

Among the vast number of educational systems in our "divided world" (to borrow Conant's phrase), I see two broad perspectives as educational alternatives:

(1) We can develop an educational system that is exclusionary, screens people out, locks them in, denies them "live options" and upward mobility, functions in ways that depersonalize and dehumanize, and produces bigoted patriots for whom the flag becomes "the last refuge of the scoundrel." This system identifies differences, translates differences in negative terms, categorizes persons as "bright" or "dumb," "superior" or "inferior," legitimatizes these differences, and develops effective mechanisms and processes to reinforce the differences. This system builds walls between people and invites divisive conflict and catastrophe. We have all seen such systems; some reluctantly admit having been part of such a system; some have spent long hours attempting to rehabilitate the near casualties of the system; others have tried to modify it with varying degrees of success.

(2) There is another exhilarating alternative, exceedingly difficult to structure and implement. In a world of "forced propinquity," it appears as the only viable alternative appropriate for our times. It is a system that gives positive recognition to individual, cultural, social, economic differences, and seeks to build bridges between peoples. The commitment is to multicultural education that never forces a person to choose a culture or to deny his ethnicity: other cultures are positively accepted as opportunities for profound enrichment and new vistas of cross-cultural understanding. We have too few systems building bridges; we have too many building walls.

Expectations and demands on the resources of educational institutions far exceed available resources. Accepting this as the "nature of the given," educational institutions are forced to make some difficult decisions. Pressures within and without the university dictate the necessity for frankness and for wider involvement in decisions about governance and the allocation of resources. Teaching, research, and service have been historically considered as the significant missions of universities. Some students and faculty members are raising searching questions about what they perceive to be the actual rather than stated missions of the university. Concerns about institutional integrity and legitimacy are crucial. Students and faculty are not only pressing for involvement in the decision-making process at every level, they have come upon a subtle insight: more important than the representation and participation in the decision-making process is the prior, and often more critical, issue of "who decides"—the selection and structuring of the constituencies. And in the final analysis, the budget is a significant index to the real priorities of a university.

Writing in *Teachers for the Real World*, Pearl, Burns, and Foster articulate a serious indictment of teacher education:

> Racial, class, and ethnic bias can be found in every aspect of current teacher preparation programs. The selection processes militate against the poor and the minority. The program content reflects current prejudices; the methods of instruction coincide with learning styles of the dominant group. Subtle inequalities are reinforced in the institutions of higher learning. Unless there is scrupulous self-appraisal, unless every aspect of teacher training is carefully reviewed, the changes initiated in teacher preparation as a result of the current crisis will be, like so many changes which have gone on before, merely differences that make no difference.

Taken seriously, the implications of that statement would have profound effects on *how* we train teacher educators and educational personnel; *where* we train them; *how* we staff and with what competencies; and the criteria by which we would assess their performance and therefore assess our training programs.

Institutions and persons must perform clearly defined tasks in a climate of profound accountability. When we have looked at offices, departments, and programs, we shall then have some clues to why and how institutions can absorb some of the necessary changes. Meaningful research will reveal what we are teaching and students are learning from our hidden curriculum:

How to conform and not take risks
How to tinker with the system when we need to overhaul it
How to put Bandaids where the diagnosis suggests corrective surgery
How to deal with symptoms rather than diseases
How to hold others accountable and not be accountable ourselves
How to respond to pressures without giving up anything important

We must discover reconnections for learning by building realistic and viable partnerships involving the universities, local education authorities, governments at the federal, state, and local levels, professional associations, parents, and students. This will mean working productively with persons we do not like and with whom we do not agree. Just as importantly, this will mean we shall have to develop a high tolerance for ambiguity.

Approaches to Educational Reform in Latin America

Education, and teacher preparation in particular, has been the subject of intense debate and widespread activity in recent years in several Latin American countries. Following early postwar changes, education in Latin America was generally not emphasized until its importance was recognized in relation to the total development process, a concept which received great interest and support in the sixties from several governments, international bodies such as the Organization of American States, the Inter-American Development Bank, and the Economic Commission for Latin America, and from international programs such as the Alliance for Progress and various literacy programs of Unesco. The papers and discussions at the 1971 World Assembly reflected much of the current ferment arising from the issues, problems and goals of Latin American educational reform; the participants were in agreement most firmly on one goal, namely, the pervasive need to coordinate and integrate educational planning and development, especially with respect to teacher training, in relation to the overall development plans of the country and the region. On the following pages, this objective and other issues are treated by several Latin American educators as they present the salient points of the educational reforms in their respective countries.

Brazil

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The necessity for "reform" in educational systems is clear and the good intentions and sincerity of those who attempt them is seldom questioned. What is problematic, however, is the consequences of such efforts. We have had a considerable number of such "reforms" and the result has often been only to make people doubtful that changes can be made. In the past, many of the reforms have been "paper reforms" and they came about only because the situation became critical. As a result, they were not the thoughtful and organized programs needed. They were characterized by promises of "something new" and different, and did not take into account the balance between the available resources and the promised finished product. Further, they have generally been of a highly individualized or personal nature, have had little significance, and have been quietly replaced by a succeeding proposal and promise of the same character. It is clear that the social, physical and population conditions of Brazil call for programs directed to the total educational system rather than the piecemeal efforts characteristic of the past.

With the implementation of the 1968 National Plan for Education (NPE), the government began to view investment in education as a national obligation. Using its constitutional powers, it established a Program of Educational Targets (Educational Policy). Since then, educational reform has begun to resemble a truly cumulative process. Institutional planning is becoming closely linked to the political decision-making involved in the drive toward development. Under the NPE, education became instrumental in accelerating development, social progress, and expanding job opportunities. As a result, education became a "budget" priority under the Plan and did not depend on the Minister's prestige to secure a greater share of budgetary funds; education is now characterized as a component part and a multiplying factor, as a fact and a product of development.

In this perspective, national reform takes on a new meaning. There is a real justification for the government's decision to develop strong programs, based on well-defined objectives and supported by adequate funding, so that the solutions advocated materialize. Therefore, we look at the Educational Reform not as just another "reform" but as part of an overall plan, which, having already yielded good results in other sectors, gives us the confidence that the education targets will also be accomplished.

Brazil's Educational Reform: What Exists Now and What Is Sought

A compulsory elementary education for 4 and 5 year-olds is provided by the states. However, it is not yet available to all; the shortage rate varies from state to state, being higher in rural areas. Elementary education is characterized by high drop-out and

repeater rates, curricula which do not reflect the actual Brazilian situation, and a great number of new university schools which are, in fact, isolated schools. The secondary level is divided into two levels: a 4-year junior high school program (Ginasio) and a 3-year senior high school program (Colegio). The Ginasio is of a preparatory nature, and not intended as terminal education. The Colegio course may offer some professional options. These educational levels lack continuity, variety and flexibility; they look more like a row of steps. Elementary education is completed only as a step to enter the junior level, completion of the latter being a requirement to enter the senior level. A college education is essential to anyone who wishes to become a professional.

The National Congress is deliberating a bill under which elementary education (Fundamental Education) will be accomplished in 8 years; its Article 19 makes it compulsory for 7-to-14 year-olds. In contrast with the present system, Fundamental Education will involve the present elementary education for 4-to-5 year-olds and the Ginasio or the first cycle of secondary education. Clearly, this is not just an overlapping of school years; integration of the 8-year program will be both vertical and horizontal. Fundamental Education will be provided to 7-to-14 year-olds and will be terminal and conclusive in nature. The curricula will provide a practical orientation to school activities.

Fundamental Education, which will provide an unprecedented universal education common to all Brazilians, will be based on the following principles:

a) The development of "basic abilities" which are common and necessary to all, such as:

1 - ability to communicate;
2 - curiosity and interest;
3 - imagination and creativity;
4 - logical sense and balance;
5 - practical mind and aesthetic sense.

b) The recognition of students' own interests and inclinations (specific abilities).

c) The Brazilian's commitment toward his role as a social being integrated into the environment he lives in, recognizing his citizen's rights and duties and the problems of the community where he belongs, and helping solve those which he can.

d) Mastery of the basic structures of the subjects or areas studied and of the knowledge and techniques that increase the efficiency of the activities related to daily and professional life.

Obviously, the reform has to be carried out on a national scale, although gradually, as provided under article 73 of the bill:

> "The program will be introduced step by step, according to the peculiarities and possibilities of each system of education with due regard for the State Plan. It should follow a preliminary plan setting forth its general guidelines in order to establish what must be done first."

The States will be given a time limit, from the date the reform law is promulgated, to establish priorities and prepare the State Plan. The State plans will take into account:

a) The administrative machine
b) Financial resources
c) Physical resources
d) Human resources

In addition to the administrative and legal measures created for Fundamental Education there has also been established the principle of the allocation of a "minimum" percentage of the local, state, and federal budgets to be used for education. Recently the Federal Government entered into agreements with the United States (AID), the European Socialist countries, the Inter-American Development Bank, and the World Bank for assistance in carrying out the reform. The proceeds of loans are used for the specific programs already established within the spirit of Brazil's educational reform. They are intended specifically for investment in the expansion of our physical resources (construction of new schools) and the education and training of human resources.

As our current physical resources are insufficient for the maintenance of the present system, there is no doubt that the reform will serve to aggravate the situation unless the reform measures are carefully and thoughtfully implemented. In addition to measures directed at the expansion of the school system, programs have been developed for optimum utilization of physical space and equipment, as in the case of Project Rotation or Alternate Sessions. This project has been implemented in the City of Salvador, State of Bahia. Under the program, no school space is left unused in any one month of the year, enabling a 33% increase in enrollments.

Basically, the system provides for alternative periods rather than students beginning their class work at the same time. For example, a ten-classroom establishment that would normally be used (in three daily sessions) by 1,200 students will, with no further investment, have its capacity increased to 1,800 students. The school year starts (say in January) with the normal enrollment (Groups A and C); two months later the "extra" 600 students will enter school (Group B) and Group C will recess. As the school year is divided into 4 months of class work, a two-month recession period, 4 more months of class work, and a final two-month recession, it can be seen that the physical space will be fully utilized by the three groups throughout the year.

Project Rotation

	Jan.	Feb.	Mar.	Apr.	May	June
A 600	x	x	x	x	x	
B 600			x	x	x	x
C 600	x	x			x	x
	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
A 600	x	x	x	x		
B 600			x	x	x	x
C 600	x	x			x	x

To be successful, any action taken to expand or improve the school system will necessarily imply the preparation of the personnel needed. In this regard, the Government is creating new Faculties of Education, Technical Education Centers, Science Centers and specific programs such as PREMEM (Program for Expansion and Improvement of Secondary Education). PREMEM uses the funds from foreign loans and domestic sources at the rate of one American dollar to the Brazilian cruzeiro. In the first phase of activities (4 years), which began in 1970, the program is being carried out in four states by promoting the construction of 272 new schools which are already included in Brazil's Educational Reform, although they are still known as multi-purpose schools (Ginasios Polivalentes).

In these schools, the equipment, the curricula and the administrative and teaching organization should lead to the fulfillment of the basic objective, that is "to conciliate the requirements of general education with those of vocational initiation." The crucial determinant of the program's success is the recruitment of qualified teaching and administrative personnel for the new school establishments. This problem takes on a more serious character because the Brazilian secondary school system has shown a rate of expansion in this decade of more than 200% which has greatly increased the shortage of qualified teaching personnel.

Of the average 10,000 licensed teachers graduated from Faculties of Philosophy, only some of them engage in the teaching profession, either because the competitive private labor market absorbs most professionals in scientific areas, or because the newly graduated are not interested in moving to the interior (poor areas where the rates of non-licensed teachers are usually higher than 60%). Finally, the factors bearing on economic conditions and professional status compel a teacher to either teach occasionally or to overwork himself for a living. It was then decided to develop a program and model designed to prepare, in the short run, a contingent of teachers which would at least be sufficient to meet the needs of the new Ginasios built by PREMEM.

Outline of a Model Program for Teacher Education

A - LEVEL AND TYPE	The programs are offered at the level of one-subject *Licenciatura* (short-term teacher training program) for first cycle secondary teachers (the last four years of the Fundamental Education program). The candidate is licensed to teach one subject only.
B - TRAINING INSTITUTIONS	Faculty of Education of Philosophy, Technical Education Centers, Science Centers.

C - DURATION	An average 1600 hour-program administered during a period of 40 to 44 weeks on a full-time and intensive basis.
D - CURRICULUM	Of the 1600 hours, 60% will be devoted to specific subjects, while 40% will be devoted to practice work.
E - CANDIDATES	a) Minimum age, 20 years old and maximum age, 35 years old. b) Requirement: High school completion diploma. (11 years of schooling) c) Residence: Preferably from a town situated in the interior of the States where the new schools will be built.
F - SELECTION	a) Through systems regularly used in Brazilian Universities and Competive Entrance Examinations. b) For some areas: Trial Period and Aptitude Tests.
G - TEACHING STAFF	Recruited from among the more modern teachers drawn from Training Institutions.
H - MARKING SYSTEM	Modern methods, which measure not only the academic achievements, but also sociability, effort, interest, diligence, regular attendance, and other behavioral attitudes.
I - LABOR MARKET	Employment is guaranteed after completion of the program. The State (supporting such schools) will hire the licensed teachers for assignment to the various multi-purpose schools, at their option. The State's commitment is made by a signed agreement.
J - AID	Students will receive an allowance in the form of a scholarship covering the period of the training program.
K - COMMITMENT	Selected candidates agree to work in the school of their choice for a period of two years. In case they decide not to honor their commitment, they will reimburse PREMEM for their preparation cost.
L - ASSISTANCE	A special program will be set up to help the teaching staffs of the new schools during the initial phase of operations of the multi-purpose schools.
M - COURSES	Portuguese, Mathematics, Science, English, History, Geography, French, Practical Arts, Commerce, Agriculture, Home-Making, Fine Arts and Physical Education.
N - COSTS	The project cost is estimated at $28,970,150.00 which is partially financed from USAID funds. The average cost per student is $3,716.00

As an example of the program, given below is an outline of the short-term teacher training program in Sciences, which is now being given in the Faculty of Education of the Bahia Federal University:

CURRICULUM

A - *Scientific Subjects*		B - *Practice Program*	
Physics	270 hrs.	Educational Psychology	80 hrs.
Chemistry	140	Structure & operation of a multi-purpose school	120
Biology	340	Methodology & teaching practice	360
Geosciences	80		560
Supplemental Mathematics	70		
	900		

C - *Supplemental Subjects*	
Brazilian studies	80 hrs.
Supplemental Portuguese	60
	140

Total = 1600 hours.

The scientific disciplines, although with program content at a relatively high level, have not excluded the teaching problems encountered at the Fundamental Education level (first cycle of the present secondary level). Integration of the various scientific disciplines has been accomplished and the approach rendered mainly practical by means of research libraries, laboratory sessions, discussions, practical drills, the making of models, assignment of materials, guided instruction, and excursions. Pedagogic disciplines provide a professional base for the trained teachers along with practice work in experimental situations such as planning activities at the secondary level, class handling, achievement rating, and guidance. The teachers get together and hold weekly meetings to discuss students' achievement and behavioral reactions.

This system has yielded extremely good results. All the 30 students initially enrolled in the program completed their training with complete success. Upon completion of the program, the conclusion was reached that the short-term training programs have much to offer to regular teacher education programs and that the Universities should not miss the opportunity to draw on this experience. Nor should one overlook the administrators, supervisors, counselors, secretaries, and librarians, who also are being trained with a spirit of teamwork so that during the training program each school staff will find it easy to establish professional relationships.

Considerable attention and hope are now directed to the new program depicted here. For the success of this program will help bring about a major solution to the crucial problems of Brazil in the area of human resources for education.

Chile

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Among the greatest problems confronting the Chilean educational system prior to the recent educational Reform, which was begun in 1965, were the serious deficiencies and lacunae in the improvement of the teachers, pedagogical experimentation and research, development of curricula and curriculum materials, and the training and upgrading of the administrative and technical personnel in the system. In order to improve the system in these aspects, it was thought that a comprehensive solution would require the creation of a high level institution. Thus, in January, 1969, the Center for Educational Improvement, Experimentation and Research was created, based on an earlier Teacher Improvement Program begun as a part of the Reform in 1965.

The staff of the Center, which is funded directly by the Ministry of Education, is drawn from the universities, normal schools and school systems. Of the 309 employees in 1972, there were five directors, one hundred and seventy-two professionals, forty-eight administrators, and eighty-four support persons. It is important to realize that the Center has developed a team of professionals of the highest academic level. Among them are well-known scientists, men of letters and the arts, former rectors and deans, and other distinguished educators. The assembling of this talent, for which much credit must go to the then Minister of Education, Don Juan Gomez Millas, has been a key to the high quality and success of the Center's efforts.

The Improvement of Teachers

From the first moment of the Reform, it was considered indispensable that every teacher be given the opportunity for systematic upgrading. In order to meet this immense task, the Center has cooperated with the normal schools and universities to provide day and evening inservice courses. In the Spring, the courses offered, both in Santiago and the Provinces, have stressed the introduction of new curricula. Throughout the year, the courses are designed to explore the management or utilization of the advances which have been developed in the various disciplines. Up to now, the Center has upgraded about 90,000 teachers or an average of 15,000 annually. Of these, 50% are in basic education, 30% are secondary level teachers in the sciences and humanities, and the remaining 20% are from the technical and professional sector at the secondary level.

Between 1966 and 1972, the Center conducted international courses in agreement with Unesco and the Organization of American States (OAS). These courses were designed to upgrade the teachers in primary and middle levels throughout the continent. Among these courses was Methods of Teaching Basic Sciences, and a similar one for mathmatics, each of two months duration and carried out in cooperation with Unesco. The OAS assisted in courses on the teaching of the natural sciences, mathematics, and language and literature, all of three months duration. The OAS also assisted in providing a ten-month long course on educational planning. Both the participating professors and the practicing teachers included numerous foreigners; the teachers were at least 50% non-Chilean and several professors came from England, Germany, Russia, the United States, France and other Latin American countries such as Argentina and Colombia.

Improvement of Administrative and Technical Personnel

Besides teachers, the Center also upgrades and assists the specialized and general administrative staff in the Ministry of Education. Numerous seminars have been held for principals of high schools, directors of professional schools, department heads, staff of the technical units of the Ministry, superintendents of education, supervisors over basic education, and for the technical personnel of the National Evaluation Service.

There is presently underway at the Center a project designed to train top level educational administrators and specialists in a quantity sufficient to meet the requirements of the Chilean system for the next ten years. This project is managed by a committee composed of representatives from the three major supporting agencies: the Chilean Ministry of Education, Unesco, and the United Nations Special Fund. In addition, representatives of the universities also serve on the committee to ensure a close relationship between the training and the eventual roles of these high level specialists.

Curriculum Development

In its founding statute, the Center was charged with the task of cooperating with the Ministry in the development of new curricula. In fact, since its origin at the beginning of the Reform the Center has had technical teams which have dealt with the task of developing new programs and curricula. In this area, the Center developed in the first place the transitional studies for the seventh and eighth year which were utilized in re-structuring the system. It also collaborated in the development of new basic education programs and enriched the curricula of professional education programs at the secondary level in both general and technical subjects.

It is important to note that the curricula have been developed in keeping with adequate objectives for each level and subject, objectives which are both feasible and based on flexible contents. In this respect, much effort is made in order to give the teachers the opportunity to introduce corrections and modifications during the first year of application of the new programs. Once they are developed in the Center, the programs are sent to the National Educational Council of the Superintendency for its approval. Then they are tested and modified before becoming official through a governmental decree. It is anticipated that, with the Center's programs of curriculum materials development and inservice training, the teachers will be in an excellent position to properly apply the new curricula.

Evaluation and Curriculum Materials

As a complement to its inservice training task, the Center has made a broad effort in producing teaching materials. Teacher's guides, anthologies, technical materials, sourcebooks and the like have all been produced; at this time, more than 200 different items have been prepared and 250,000 copies distributed by the Center. To the technical staff of the Center has fallen, also, the task of cooperating with the National Evaluation Service in developing the first National Objective Examination applied in the educational system. Over the past four years, this examination has been evolved at the Center in accordance with modern techniques. Moreover, the Evaluation Department of the Center has created a series of three month courses for basic and middle-level teachers toward the goal of enabling them to specialize in modern methods of evaluation. Finally, they are currently developing a battery of tests to evaluate the Educational Reform in all its aspects, and especially in the area of curriculum.

Educational Research

The Center is responsible, with the Office of Educational Planning, for the coordination of educational research. So far the Center has concentrated on applied research, that is, studies designed to serve as a practical basis for later development, such as new programs, guides, texts, and so on. For example, linguistic research with four to six year old Chilean children led to the new system of reading instruction called "Reading Progress." Worthy of mention also is the basic research which resulted in the creation of a program of sex and family life education, a true revolution in the educational sphere of the country. In 1969, the Center conducted the first Seminar on Educational Research in which all the institutions and professional researchers in the country presented and discussed their research. The results and proceedings of this encounter were published in the Ministry's *Review of Education,* numbers 22 and 23.

Pedagogical Experimentation

Another responsibility of the Center is to coordinate and stimulate pedagogical experimentation within a broad concept in which the nation's teachers participate, with special assignments. In its few short years of existence, the Center has accomplished a rich compilation of experiments:

A. "Reading Progress"

The Center developed a curricula series for teachers and students, applying the new techniques in the field of teaching and reading. Materials have been created for the four basic primary years which have been applied on an experimental basis in more than 200 schools in several regions of the country. This successful experiment has become a model for the kind of work which the Center does, in that it carried out the basic research, developed the material, trained the teachers to experiment with the material, and then applied it later at a national level.

B. Project for Inservice Training of Science Teachers, Basic Education

This project consisted of introducing modern techniques and methods to the teaching of natural sciences. Materials were developed and sent to nearly 2,000 teachers in 1970. Technical teams from the Center traveled constantly to the different regions of the country in order to provide technical assistance to the teachers in managing and applying this material.

C. Sex Education and Family Life

Conscious of the responsibility of the Ministry of Education with regard to the total education of young people, especially in view of the multiple problems that effect them, the Center has taken the initiative and developed a program on sex education and family life with the objective of helping young people to scientifically meet this delicate problem. This project consists of creating a program and corresponding teaching materials. A team of specialists have been brought into this task along with the technical staff of the Center. Currently the program for secondary education is finished and is being applied on an experimental basis.

D. Comprehensive or Integrated Schools Project

The Ministry of Education, in its effort to fundamentally change the structure of the system in order to make it adequate for the requirements of sustained and accelerated change, has embarked on an experiment involving a new type of school for the secondary level. In this respect, three high schools in Santiago have incorporated into their curriculum a series of elements which give them a greater degree of integration of the levels and curricula of the two sectors of the secondary level: scientific-humanist and professional-technical. Even though the Center is not directly involved in the coordination of this project, several of its experts have participated in its development and execution. The results obtained during its application in 1969 were positive and the project was continued in 1970.

E. Educational Television Project

In 1969, the Center created an educational television department with a view toward utilizing this medium of mass communication to conduct courses for the improvement of teachers and for regular classes of students. During most of 1969 and 1970 this department was in the process of being structured. Nonetheless, it has been able to prepare a television series for students in the field of natural sciences and for others in the area of sex education. The teachers of the different departments have worked

together with the technicians of the television department in the preparation of guides and workbooks which accompany the television series. From the results of an evaluation of these experimental projects will come the answer as to whether or not the Center will concentrate in the future on the use of television for inservice teacher education.

F. Phonograph Records

The Center has developed material for phonograph records which are distributed as audio aides for the teaching of specific lessons. The purchase of these records has been approved by the Ministry and in May, 1971 the material will be in the schools and this experiment can then be evaluated.

Conclusion

From the scope and variety of efforts by the Center, it may be said that it has been the engine that has moved the educational reform forward. It is, however, important to emphasize certain things:

1. In the first place, the Center has brought together a technical team at the highest level which has developed in five years an extraordinary record of progress in innovation with respect to the key aspects of curriculum such as pedagogical methods, techniques, and materials.
2. The Center has brought together and coordinated a series of tasks which were previously disbursed, and initiated others which did not exist and which are indispensable for modernization of the system.
3. Thirdly, the Center has introduced innovation into the system through working directly with the teachers.
4. The Center has given a new value to the work of the teacher through the work with them in educational improvement and experimentation. They have been able to increase their salaries by up to 20% in this scheme and efforts for professional improvement are now valued as well as years of service.

The Center proposes, as a goal, to eradicate rote learning through the inservice training courses and the development of new programs and guides. This goal and the above objectives should be organized to give the teachers a rational pedagogical philosophy which will include a clear definition of the function of the teacher as the guide or director of the process of change and the function of the students as active and creative participants in the process of learning.

Argentina

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Between the years 1968 and 1971 the Argentine Republic began a major modification of its system of teacher education for the elementary level. Prior to 1968, elementary school teachers were trained in normal schools in a system which had changed little since it founding in 1870. Until 1941 the training in the normal schools required four years beyond the elementary level and consisted mainly of a general high school education plus some professional work. Pedagogical theories were applied in the "application" or laboratory schools attached to the normal institutions. In 1941 a common basic course was established for three years, after which the prospective primary teacher would take the professional component in the ensuing two years. By 1967, more than 30,000 teachers were being graduated annually from the 813 normal schools, while the capacity for their employment was no more than 10,000 openings. It was obvious in view of the increasing surplus of inadequately trained teachers that teacher education had to be moved to a higher, more selective level. The problem consisted of determining where this advanced training would take place: in the universities, in new institutions, or in normal schools with additional years of studies.

In spite of stubborn resistence, a decision was eventually reached to no longer utilize the normal schools, which would become general high schools. A new teacher training program was proclaimed on September 11, 1969 by the Minister of Education, Perez Guilhou:

> The training of teachers for the primary, junior high and high schools will be done at the third level, that is, once they have finished their high school

> education...the career of primary school teacher will require at least two years of professional studies beyond high school, no matter what type of course was pursued in the high school.

To meet this goal, 118 new national Higher Institutes of Teacher Training were created; to this number were added 29 provincial Institutes of a similar nature, 4 universities, and about 50 private institutions at the tertiary level. The latter will be required to meet the same standards of the public institutions and all will operate within a system of automatic equivalencies. In principle, these 200 or so institutions will offer preparation for the following careers:

a) Elementary level teacher: two-year course
b) Intermediate level teacher, subject specialization: three-year course
c) Middle-level (high school) teacher, subject specialization: four-five year course

The duration of courses may vary according to the background of the student upon entry. In addition, specialties such as rural education, adult education, special education, and courses in administration and educational technology will be available. Not all the new Institutes will offer this range of programs at the beginning; they will vary from the simplest which will prepare only elementary teachers to the most complex in the large urban centers. All the courses and requirements for the various careers and specialties will be carefully articulated so as to permit the optimum individual mobility and choice without the waste of time and resources.

In order to decide the location and installation of the 118 new Institutes, the Sectorial Office of Development for Education of the Education Department carried out a detailed survey which included the following tasks:

a) Determination of the teachers needed for the elementary level in the years 1970-1990 for each Province. For this purpose, it was necessary to establish projections of elementary school registration for each school year in each Province, taking into consideration the respective vital statistics projections and four different assumptions of yield improvement. The needs resulting from these estimates were complemented with projected needs due to the replacement of teachers who retire. This made it necessary to have more detailed data about the teachers in service at present, classifying them according to age, number of years of service, provinces, authority and inspection record. This task was accomplished with the use of the computer of the Calculation Center of the National Technological University.

b) Evaluation of the faculty and administrative structure of normal schools and Teachers' Institutes presently in the country by means of a survey. The degrees, inspection records and other participation in higher education of the faculty were analyzed as well as the condition and capacity of the corresponding buildings.

c) Determination of registration estimates for elementary level teacher training courses through an inquiry applied to a country-wide sample of senior high school students and other teachers aspiring to fill vacancies.

In order to supply the teachers for the Institutes whose first classes began in 1971, priority was given to the teachers of pedagogical subjects of the former normal schools who were in retirement, provided they held an advanced degree. In every case they will follow a course of review and updating. About 9,000 teachers registered for the competitive examinations to select the faculties for the new Institutes. Some 900 were selected by the well-qualified juries, thus providing a wide field of activity for the holders of degrees in educational sciences and other basic disciplines from Universities and Teachers Institutes. This will remedy the employment problems faced at present by these professionals.

The degrees of "National Graduated Teachers" will retain their validity for access to a teaching career at the elementary level and eventually, according to the rules that will be established, for the intermediate level. However, in the planned Teachers Statute Reform, the professional qualification system will recognize the different levels of teachers degrees. For that reason, the Higher Institutes of Teacher Training will remain available for the continuation of studies, specialization and improvement of these graduated teachers in various types of courses.

The course for elementary level teachers extends over two academic years, including a four-month practice period as a resident in an elementary school. The residence practice can be done during the last part of the second year of studies, during hours different from those of attendance at the Higher Institute of Teacher Training or at the end of the courses. The fulfilment of the residence is an absolute requisite for the obtaining of the qualifying degree. The curriculum for the elementary level teacher's

course requires a yearly minimum of 600 hours of academic work by the student, or a total of 1200 hours for the whole course, in addition to the residence time. This minimum of academic hours can include classes, seminars, individual or team research work, observation, and practical activities in conformity with the structure, regime and organization of each Institute.

The composition of the curriculum includes twelve compulsory subjects of one academic year duration each, grouped in three basic nuclei:

A. Fundamentals of the Educational Process
   1. Theory of education
   2. Theory of apprenticeship
   3. Evolutionary psychology
   4. Elements of philosophy

B. Curriculum Development
   5. Language and literature
   6. Mathematics
   7. Physics and chemistry
   8. Biology
   9. Social sciences
   10. Handicrafts and esthetics
   11. Physical education

C. School Organization and Management
   12. School organization and management

Five optional activities are available, each four months long, and the student must take two:

1) A seminar on social, economic and cultural problems, including the role of the Institute in national development.

2) A seminar on one or more contemporary educational problems taking into account historical and comparative aspects.

3) An intensive study of evaluation techniques.

4) A concentration on training for the use and preparation of teaching material and audiovisual and library resources.

5) An examination of phoniatrics and voice training.

In addition to these activities, the Higher Institutes of Teacher Training may offer for this career facilities for the study of a foreign language on an optional basis. Teaching practice will be essentially performed during the residence period, under the joint supervision of the professor and the teacher in charge of the activity. Before the residence period the students will observe and conduct classes within the time established for the study of the curriculum development. The object of the residence period is to acquaint students with the organization, management and operation of the school unit.

The nuclei called Fundamentals of the Educational Process and School Organization and Management will represent 45% of the total academic work hours. Forty percent is allocated for the nucleus devoted to Curriculum Development, and the remaining 15% for optional activities. Four subjects belonging to the nucleus on Educational Process and two subjects corresponding to the branch of Curriculum Development will be taught during the first year of studies. Each year the teachers of the different subjects and activities will prepare the program for the course abiding by the objectives and contents described above. The programs will include adequate bibliographical and methodological references as well as the planning of the tasks to be performed during the year or during the four-month period. The teachers designated for the different subjects and activities in the Higher Institutes for Teacher Training during 1971 must participate beforehand in updating seminars organized by the Ministry of Culture and Education and by universities or other entities.

The entire system will be geared to the features of higher education. For that purpose, personal and team research by the students will be sought and the continued and organized use of documentary, bibliographical, observational and experimental material will be encouraged. In general, the active participation of the students in the apprenticeship process together with critical analysis, innovation and dialogue will be encouraged.

The registration of almost 20,000 students (many of whom are trained teachers who want to improve their knowledge) coming from all sections of high school education, emphasizes the fact that the country was ripe for such reform, contrary to the views of critics. The latter, besides the anachronistic and sentimental position taken mainly by some teachers' guilds which wanted to keep unchanged the old teacher training schools, argued that in view of the low remuneration of teachers the new studies would not awaken enough interest. The results have proven otherwise.

Peru

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The education of teachers in Peru has been traditionally achieved through institutions of higher education such as normal schools, pedagogical institutes, and faculties of education at the universities, now called academic programs of education. Seventy governmental institutions of teacher training currently exist, as well as twenty private ones. There are also thirteen academic programs of education at the universities. But all of this is currently under going a complete change. The Revolutionary Government which has ruled Peru since October 3, 1968 has begun a program of basic structural reforms, including educational reform, toward the goal of creating the new man for the new society resulting from the structural reforms underway. Since the essential quest of the government is toward the achievement of social justice, education must be transformed in this sense to provide genuine opportunities for the full realization of the individual.

With this concept, and toward the goal of universal education, the educational reform in Peru has been based on the following educational levels:

Initial Education: from birth to five years of age–to serve the child in his most formative years.

Basic Education: from grade one to grade nine–based on the concepts of psychological maturity, the progression of learning, and the necessity for a minimum repertoire of skills and knowledge.

Higher Education: (specialized and optional, but open to all)

a. First Cycle: in the Higher Professional Schools

b. Second Cycle: in the Universities

c. Third Cycle: in the Schools of Higher Studies and in the Research Programs of the Universities.

In the first cycle of higher education, which students generally enter at age fifteen, a program of general education will be undertaken as well as professional specialization in subject matter, in professional techniques, and in orientation to the profession. These courses will last from six to eight semesters. Ten percent of the time will be devoted to intensification and review in the areas where it is considered necessary. Even though education is included among the services for which the students will be preparing themselves–administration, health, economics, education, communications and transport, construction–there is no decision yet as to the content of the studies which will comprise the course in "education" or to their precise limits in relation to the preparation of teachers. The most probable course is one which is considered as a kind of training for "the assistance of other professionals." Assistance of this nature can be useful especially in remote regions of our territory, which attract few professional teachers, as a means to combat illiteracy and to provide a basic education for all.

It is the general opinion of those in the teaching profession that the professional preparation of the teacher be integrated into the second cycle of higher education, at the level of the *Licenciatura.* The reasons cited for this are: the teaching profession requires a selection of human quality superior to that of the other professions, an emotional balance and maturity which guarantees effective functioning in the profession; excellence in the profession requires that it not be practiced under requirements inferior to those of the other professions which demand the title of Licenciado; finally, by its nature the teaching profession should not be a transitory career. The second cycle of higher education is given in the universities. The government schools of the military government, religious seminaries and other public institutions also provide education in this cycle. Education in the universities is conducted under conditions of academic, economic and administrative autonomy.

However, the new University Law, included in the Education Law, has not been given. This Law will establish the mechanisms of the Reform and reveal the structure of the professional pedagogical studies within each level. Presently, the studies for the *Licenciatura* in teaching should be preceeded by the course of "general studies" at the university, which may be obtained usually in four academic semesters.

The third cycle of higher education implies a rigorous training and creative focus in one branch of knowledge, or with an interdisciplinary theme. The *Doctorado* is the highest qualification of this cycle. The studies leading to the masters and the doctorate are obtained in the National Institute of Higher Studies and in the universities authorized by the National Council of Peruvian Universities. This authorization will be given in accordance with the evaluation, which is being carried out during 1971 by the Council, of the human, economic and technical resources of each university.

With regard to the content itself of the specific preparation of teachers, the Reform Council explains it partially by referring to the retraining of the teacher as a first step in applying the Reform currently underway. This retraining consists of the in-service education of teachers for the progressive application of the Reform. It has been fully recognized that the teacher is the one who directs the educational process and, therefore, will be the one who translates into action the principles of the Reform. Thus, his preparation and improvement, his right to the fruits of the culture and his economic status are considered with great attention, but unfortunately the financial resources of the government still have not permitted his economic improvement. It is proposed that the knowledge which the teacher possesses ought to be gained in relation to a genuine comprehension of Peruvian society, which will convert him into an agent of educational change and other structural changes which are beginning to occur in the country. The psychological and pedagogical training of the teacher should be based on the study of the nature of the child and his progressive capacity to learn, on an examination of the relations between education and society, and on teaching skill.

With regard to the retraining of teachers so that they may achieve new attitudes, a certain number of topics and materials, graded and expressed in the form of problems toward which the teacher will react, will be selected to induce in him the new attitudes. The constant dialogue, psychological insights, and the study of the materials will strengthen the change toward the desired attitudes. The different disciplines of the teacher education curriculum will have to be systematically reformed to produce the proper orientation of the teacher. Retraining includes two stages: the first, in which the teacher leaves his position and studies intensively for a period of about five months; and the second, in which he returns to his school and maintains permanent contact with it. At the end of the first stage of retraining, a total of 120,000 practicing teachers will be included. There will be a careful evaluation of the performance of these teachers which will permit promotions for those demonstrating excellence and dedication as well as the releasing of those teachers of very low performance. The plan is linked to a future effort of the Institute of Educational Research which will be created to provide for the introduction of new directions and methods in teacher training.

Venezuela

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Venezuela is presently undertaking educational reforms designed to make the system meet the requirements of economic and social development. The year 1958 is basic to an analysis of these reforms, especially the activities directed toward the training and later upgrading of teachers. In the five years prior to 1958, the enrollment in the primary schools increased by 21 percent. The change of government in 1958 resulted in a violent educational explosion at the elementary level and by 1962 enrollment jumped another 46 percent. This tremendous expansion in enrollment called for an extraordinary response from the educational system, both in terms of physical resources and the preparation of teachers and other educational personnel.

The sixty-eight governmental and private normal schools in 1957 were not capable of producing enough teachers to meet the demands caused by this expansion. As a result, a large number of persons were incorporated into the educational system without pedagogical training. In 1959, of the thirty-one thousand teachers in Venezuela at the elementary level, more than half, 17,442, had not obtained the teaching certificate. The problem of rapid and massive educational growth, and the consequent effect on educational quality, was met with four kinds of action:

1. An aggressive policy of teacher training, including an increase in the number of normal schools, an expansion of the program of loans and scholarships for students in these schools and an increase in their budgetary quota.
2. An expansion of the in-service teacher education programs to include a much greater number of practicing teachers.
3. A reform of the curricula and organization in the normal schools.
4. The beginning of an aggressive program for the professional improvement of teachers, principals and supervisors.

During the first four years of the reform, 1958-1962, the national government created twenty-one new normal schools and the private sector added an additional forty-one centers for training teachers. The number of students pursuing the four-year course in preparation to become teachers increased from about 8,000 in 1958 to more than 32,000 in 1962. As indicated previously, this massive solution to the quantitative problem led to difficulties arising from large numbers of teachers who had great weaknesses in their preparation. Immediately after the graduation of the first of the large classes in 1962, four years after the beginning of the reform, a stringent reduction in the enrollment and the numbers of normal schools was begun. By 1970 the number of normal schools had been reduced to fifty-one and the number of teachers in training to about 14,000. But the need to improve those teachers already in the schools remained.

In 1959 a reformation was begun in the program of the Institute of Professional Improvement of Teachers, which had been established in 1951. Correspondence and vacation courses were set up which corresponded, with some adjustments, to the organization and curriculum of the normal schools. By 1965, about 15,000 teachers had obtained their certificates through correspondence and vacation courses in this program. The small number of teachers who remained in 1970 without a certificate were those who were not able to take these courses for some valid reason and were nearing retirement.

It should be noted that some groups of graduate teachers, those who already had obtained their certificates, were opposed to these programs of in-service training. Behind their arguments concerning the validity of the courses and the danger to the existence of the normal schools, was a concern for the labor market which favored those graduate teachers who had obtained their certificate in the regular manner. In fact, some of these educators who resisted professionalization in this form, favored in-service training in principle but without the granting of the certificate in this way. Whatever the justice in the situation, in-service training did convert into professionals those teachers who already had stable positions in schools by bringing to them the possibilities of promotion, better salaries, the possibility of pursuing higher education and, fundamentally, the capacities and tools which created an increased confidence in their work.

One of the major problems confronting the in-service program was the financial cost of the program. The national government, through the Ministry of Education, incorporated in the national budget the necessary funds for the operation of the courses, with equal treatment of both governmental teachers and private ones. The expenditure for the teacher/students went for study materials, and housing, food, and transport with respect to the vacation courses. In the final analysis, the funds came from a variety of sources including the government, the employers in the private educational sector, and the teachers themselves.

At the same time the problem of 17,000 teachers without certification was being dealt with, Venezuela began several reform programs in the training of educators and the improvement of their teaching capacities. Some of the more important programs were:

1. *New Curricula and Programs.* An Experimental Institute for Teacher Training was created in 1959 to test a new plan of studies for five years after primary school. This program called for three years of general studies and vocational orientation, the basic cycle, and two years of teacher training, the professional cycle. In the two years of the professional cycle the curriculum tested included five subjects of general studies together with twenty-one subjects of professional training. This program was tested at the Experimental Institute for five years during which a major emphasis was placed on the techniques of teaching, with particular stress on the role of practice teaching and other professional experiences of a social nature. The plan was extended in 1963 to all the governmental normal schools and by 1969 it was applied permanently to all private schools as well.

2. *Decree 120.* In 1969 the Ministry of Education published Decree 120 which reformed the structure and curricula of secondary education, which includes regular secondary education, the normal schools, and commercial and industrial education. As indicated previously, this decree resulted in a common basic cycle of general studies and vocational orientation of three years in length, followed by a second two-year cycle for professional training or preparation for the university. One important result of this new arrangement is the accessibility, without the previous limitations, of higher studies to the student who obtains the teaching certificate.
3. *Educational Administration.* Until ten years ago, principals of schools were selected on the basis on their teaching skill and not their administrative ability. Nor were they given any formal education in school administration. In 1961, the Ministry began an in-service education program during vacation periods for principals and primary schools. All expenses for this course were paid by the Ministry and local educational unit involved. A similar program was also begun for supervisors and there are now both in-service and pre-service courses in administration available at the Experimental Institute for both principals and supervisors.

Summary

In Venezuela and other Latin American countries there have been recent efforts to quantitatively and qualitatively improve the education of teachers, but the reforms introduced have all come within the classical structure of the normal schools and pedagogical institutes. Even when teachers are better trained within the traditional system, they must still confront large classes, dated textbooks and a dearth of audio-visual materials when they go out to teach. In comparison with the enormous changes wrought by science and technology, in view of the heavy demands made by the rapid economic and social development envisioned and already beginning, and with special reference to Venezuela's goal of reducing its dependence on foreign capital and technicians, it may be safely asserted that the recent reforms, considerable though they have been, may prove to be only a minor portent of the major changes yet to come in Venezuelan education.

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News of Teacher Education in Africa

On October 4-6, 1971, the annual Universities of Eastern Africa Conference on Teacher Education was held in Nairobi, Kenya on "The Role of Teacher Education in Promoting Rural Transformation." The topic represented a response to the concerns of teacher educators in countries which would for the foreseeable future remain largely rural and, thus, education for many of their youth would need to be relevant to the concept and requirements of rural development. A major theme throughout the conference concerned non-formal education and Professor Asavia Wandira, Makerere University, presented the critical question: "Does the attempt to see education beyond the confines of the classroom and to meet the needs of the mass of a country's entire population involve new tasks for teacher educators? If so, how ready are we for these new responsibilities...?"

On March 26, 1972, the Regional Council for Education/Eastern Council of the Association for Teacher Education in Africa met briefly in Addis Ababa, Ethiopia. Dr. John C.B. Bigala was confirmed as the new Executive Secretary of the RCE and plans were begun for the next teacher education conference to be held in Dar es Salaam in late September, 1972. Mr. W. Senteza Kajubi, ICET Executive Member, continued to play a significant role in the professional activities of the RCE and ATEA.

Teacher Education in the Contemporary Caribbean: Four Perspectives

The theme of the 1971 ICET World Assembly, "Crisis and Change in Teacher Education," was particularly appropriate to the venue, Kingston, Jamaica. In few other regions of the world is there as much turmoil, ferment and change as in the Caribbean, and especially the British West Indies. The mixture of a wide variety of races and cultures, a well-remembered history of colonialism and exploitation, the stimuli of poverty and overpopulation, the constant presence of two dominant cultures and land masses to the north and south, and the rapid expansion of revolutionary ideologies espousing a re-structuring of society ensure that this region will remain a crucible of conflict and change in the coming decades. The educational systems will inescapably affect and be affected by this transition, and enormous demands and expectations will be placed on the structures and processes of teacher preparation in the West Indies. In the following pages, four West Indians, all intimately involved in teacher education, present some thoughts on the crises and challenges confronting teacher education in the British West Indies.

Teacher Preparation for Social Change

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An event is a crisis when men think that it is. When we desire peace, security and equilibrium in our affairs a threat to these things, especially if unprecedented, may become a crisis. To that extent "crisis" is a state of mind. It is in this sense that I use the word to comprehend the "youthquake";[1] the violence - omnipresent, brutal, subtle, overt and anonymous - that confronts so many communities; the impatience with constraint that, so it appears, threatens to disrupt society; Black Power ideologies; student unrest; the new sexual mores.

Social changes occurring in the Commonwealth Caribbean today are being met with a certain pragmatism born of the culture through which we interpret them. A use of culture is to make events intelligible and significant, to identify those changes which are organic to the society or may become so. It is impossible in this short paper to do more than suggest directions for discovering the springs of Caribbean behavior. The slave experience; European colonialism,[2] with the legacy of cultural and political fragmentation; "internal colonialism"; economic colonialism, with contrasts of wealth and poverty; the variety of ethnic origins, with the possibilities of tension; these and other major forces are well documented. Relevance in education implies a practical awareness of the realities of Caribbean society and its basic nature, not ignoring certain negative traits by which it is often characterized. As a trustee of a developing culture, the teacher, whether he accepts this role or regards it as an unfair imposition, cannot ignore all the challenges with which it confronts him.

Thus, in discussing change, we must also discuss education, whether we see it as an instrument or a barrier to change. That educational systems are slow to respond to change is often deplored, sometimes in the extraordinary belief that only new ideas can save the world. Yet the educational marketplace is so cluttered with new ideas that no system dare respond to any but a small fraction of them. Some of them have genesis in a desire to change the environment; others are calculated to preserve certain values; still others are linked with the impulse to improve or modernize the process of education itself. Since the nature and the effectiveness of the response depend so much upon the awareness and the conscience of teachers, this question of what changes to respond to cannot be ignored in the training process.

Caribbean territories vary as regards the availability of candidates for training. Some teachers colleges are obliged to pay great attention to language competence and subject content, as distinct from educational theory and practice. The University of the West Indies has plans to enable large numbers of graduate teachers to obtain pedagogical preparation while in service. The educational systems, particularly at the junior secondary phase, are expanding faster than is the output of teachers. The need for a re-examination of the training patterns, procedures and content is recognized. One territory has tried to overcome the shortage by reducing the intra-mural training period from three to two years, a year's internship replacing the third year.

These changes have brought the word "standards," or some synonym of it, nervously to the lips of many, but no real definition of standards appropriate to present circumstances has yet been articulated. Confusion has arisen from traditionalist inability to accept new reality and its logical implications for action. Confusion arises over what procedures to adopt: political and economic notions on the one hand, and humanist and academic on the other. Politicians too often view the educational system in terms of manpower production; the academic perceives education as an end, or at least as a part of improving the *quality* of one's life.

In any particular concept of standards, there may lurk adherence to knowledge, ideals, attitudes and styles that have become outmoded, and it is often forgotten that excellence is not abolished by changing its idiom. In the new situation, the role and status of the teacher are therefore variably and ambiguously conceived, resulting in tensions within the personality of the individual teacher. There are tensions in the corporate body too, since significant variations exist in the educational requirements throughout. What implications do these apparent inconsistencies have for the training systems of the future, not excluding from consideration the desire for professional unity?

These fundamental questions will probably disturb the Caribbean for a long time. But teacher educators, who are exceptionally well placed to promote professional unity, should seek greater involvement with practicing teachers by joining the professional associations, conducting research into teachers' problems, providing inservice training and helping to bring moral and intellectual pressure upon the authorities to promote the best standards at all levels. In this way, teacher educators can perform a maieutic role with respect to the new ideas and mediate between generations of teachers. As regards the subject matter nexus, they can demonstrate the new function of the teacher as an interpreter of knowledge and as one who stresses knowledge values[4] in terms appropriate to the school community. They can impart concepts of knowledge about knowledge.[5]

So far, I have ignored differences in the roles at the various levels: primary, secondary and higher. In the Caribbean, the cynic might conclude that the primary teacher is prepared in such a way as to suggest he might teach even what he does not know; while at the secondary level, where education tends to be subject-centered and where, for historical reasons, concern with the local environment is a subordinate one, presumed knowledge of subject matter frequently makes a certificate of pedagogy of little account. If secondary and primary education are to be differentiated on the basis of the needs of young people at different stages of development, then the importance of differentiating training styles at all levels ought to be more carefully taken into account. It is of interest to note Russell Davis' observation that, superficially, courses and programs designed to train teachers at the primary and secondary level often show surprisingly similar formats and rubrics.[6]

At all levels the quality and range of training are limited by scarce resources and so the number of persons who can be trained and the patterns employed in training are both seriously affected. As elsewhere, teacher taining institutions have continued to dispense knowledge in ways not dissimilar to what was current decades ago when a different view of knowledge prevailed and the structure of knowledge itself was different. What then is the teacher educator's best contribution to the beginning teacher or to the older practitioner?

Perhaps the answer is to give the beginning teacher a sense of security when he assumes his full professional role and an ability to direct his own subsequent education; and to assist the older practitioner to keep abreast of the times. It could thus be the process of *becoming* that should be emphasized, and each wave of dissatisfaction with the competence of the beginning teacher is new argument for providing good continuing education on an institutionalized basis of some sort.

In today's circumstances it is not only money economies that are called for, but economies of time and the resources of intellect. The teacher educator must therefore use modern criteria and select knowledge that is of real worth to both teacher in training and school pupil. Training strategies and methodology must also respond to new criteria if we are to produce teachers who can interpret, with wisdom, the crises of today.

Notes

1 This phenomenon has been mild in the Caribbean and seems to be following the better traditions of the "movement." For a brief discussion of the history, see "Youth in Revolt," by Walter Laqueur, *Current*, August, 1969.

[2] See, for example, *The Growth of the Modern West Indies*, Gordon K. Lewis, Macgibbon & Kee, 1968.

[3] Enrichment of members of a community by the poverty of other members. Phrase used by Helder Camara, *Church and Colonialism*, McSweeney, London, 1969, p. 80.

[4] See *Alternative Models of Elementary Education*, Bruce R. Joyce, Blaisdell, 1969, p. 103.

[5] B. Othanel Smith, et. al., *Teachers for the Real World*, American Association of Colleges for Teacher Education, Washington, D.C., 1969, p. 113.

[6] See his paper entitled "Teacher Training in a School System Undergoing Rapid Expansion: The English Speaking Caribbean and the Case of Jamaica." Presented at the Unesco/UWI Seminar on Teacher Education and Curriculum Development, U.W.I. Trinidad, 1967.

COGNITIVE LEVELS, CREATIVITY AND CARIBBEAN TEACHER EDUCATION: A RESEARCH PERSPECTIVE

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First, I shall attempt to state my position on certain crucial issues in education. Second, I will relate what I have said to the concept of teacher education. Third, within this setting, data will be presented to show the thinking and action of decision-makers in education in the Caribbean territories served by the University of the West Indies (UWI). Two statements summarize the position I have assumed:

1. Educational policies and programs should be directed toward raising significantly and continuously the cognitive levels of the nation.
2. The principal activities of teacher education and training should be designed to equip the teacher to participate in the creation of new practices and not merely to socialize the new teacher to the existing practices of schools.

Crucial Educational Issues

This position on educational policies and programs will be presented by tracing some relationships that seem to exist between cognitive development and (a) language ability, (b) reading ability, and (c) mathematical ability. Cognitive development is used here in the Piagetian sense. Piaget (1950, 1953, 1955) asserts that all learning in human beings is mediated by two major processes, that is, *adaptation* to the environment, and *organization* of experiences through action, memory, perception, and so forth. As the child develops, he adapts to a succession of environments with increasing complexity of organizations. He internalizes such actions, and so constructs his intellectual world which is qualitatively different at each age level.

The effect of training on cognitive development has been investigated extensively (Bereiter and Englemann, 1966; Brison, 1966; Flavell, 1963; Hood, 1962; Hyde, 1959; Kohlberg, 1968; Tansley, 1965; Young, 1968). Most studies are concerned with the change from preoperational intuitive thinking to thinking in concrete operations. A review of these studies allows one to reach the following conclusions:

(a) The school program as we know it does not give sufficient training for the acquisition of the cognitive structures described by Piaget.
(b) Training programs designed to speed up acquisition of certain cognitive structures have had only limited and specific ends.
(c) The acquisition of certain cognitive structures is not strictly the result of maturation; it depends on a broad basis of experience.

For complete reviews of the conclusion to be derived from the experimental literature, Greco (1969) and Inhelder and Sinclair (1969) are recommended. Much of the following two pages is based on a review by Schmalor (1970).

Research findings are also available to allow us to trace certain relationships usually associated with cognitive development. For example, it is usually assumed that there are

important causal linkages between development of language and development of thinking. Bernstein (1960) compared the language of different social classes and attributed the lower intelligence (as measured by tests) of the lower social classes to their smaller language registers and restricted grammatical codes. These are some of the considerations that motivated the Bereiter and Englemann (1966) program.

However, research findings, after the effects of enthusiastic teachers and favorable conditions have been factored out, show that:

(a) Training in using certain language forms does not lead to greater success in thinking in concrete operations.
(b) Many of the characteristics of grammatical language are formed earlier than the concrete operations. Therefore, language ability does not necessarily proceed simultaneously with cognitive development.
(c) Language has different relationships with thinking at the preoperational intuitive level and the concrete operations level. At the later level, thinking takes on the form of an internalized language (Vygotsky, 1962).

The causal relationship that progress in reading ability leads to progress in cognitive development is often assumed. The two main methods of teaching reading, whole word picture training and analytical-synthetic thinking of words, are expected to have different effects on the cognitive development of the child. The first method should increase the size and potency of the child's vocabulary which should in turn facilitate his performance on verbal tasks. The second method should lead to the development of cognitive structures since analytical-synthetic thinking requires thinking at the concrete operations level. However, the conclusions that may be drawn from the research findings are

(a) Pre-school children are not automatically advanced in their intellectual development by a reading program.
(b) A reading program designed to develop reading ability improves reading ability and nothing else.

Probably, the advantages of an early reading and language program should be best described not in terms of cognitive development but in terms of other factors. For example, the child who is able to read enters school with favorable expectations. Furthermore, ample opportunity now exists for the school program to emphasize higher cognitive learning processes among those who can read.

The relationship between development of mathematical ability and development of cognitive thinking has been established in the works of Piaget. Piaget (1952) stated that the principle of the invariance of number depended upon thinking in concrete operations which begins at age six or seven. Further investigations in the United States (Wallach and Sprott, 1964), Britain (Hood, 1962; Williams, 1958) and Canada (Dodwell, 1960; 1961) confirmed the times and sequences found by Piaget. Therefore, it is reasonable to expect that mathematics programs at the pre-school age will consist of purely mechanical learning of habits without a conceptual basis. Kamii (1969) and Ezell, Hammerman, and Morse (1969) avoided the teaching of conservation of number *per se* and focused on such processes as making groups, arranging and disarranging objects, linear ordering, establishing correspondence, and *renversabilité*. However, Bereiter and Englemann (1966), using the Dienes (1960) materials to introduce mathematical concepts and operations to pre-school children, reported that they could bring pre-school children up to the level of the first school year. A Criticism is that the tests used were made of items of addition and subtraction that could be answered by mechanical counting.

This brief survey of cognitive development allows the following clear statement to be made:

1. The acquisition of certain cognitive structures described by Piaget depends on a broad basis of experience.
2. Special programs can be designed to develop language ability, reading ability, and mathematical ability of pre-school children.
3. As more pre-school children enter schools with certain abilities, the school program should be reorganized to emphasize higher cognitive learning processes.

An insightful final comment may be made in the words of Constance Kamii, Curriculum Director of the Ypsilanti Early Education Program:

> "A distinction must be made between teaching for the *attainment* of operations and for the *preparation* of their eventual attainment...I believe that the better strategy for teaching the preoperational child is to put the emphasis on the preparation of operations." (Kamii, 1970)

The first position about raising the cognitive levels of the nation may be derived as well from a completely different set of considerations. Everywhere critics are attacking the educational institutions. Universities, teachers' colleges, secondary schools, primary schools, and nursery schools have been criticized as having lost contact with life as it is known today. One may argue that similar charges of irrelevance have been laid against all institutions: the Church, the family, marriage, and so on. But the proposals for reform put forward by persons inside and outside the schools are frightening. These proposals range from allowing pupils to "discover" and do "research" in a free environment, to "doing your own thing" through idiosyncratic dress and mind-expanding drugs. Nowadays, it seems perfectly normal for a bright fourteen-year old to spend his school day not doing mathematics ("that's not my bag, man") but doing research on the number of four-letter words in yesterday's newspaper under the conforting guidance of his teacher ("that's where the action digs, man"). These proposals are frightening in the sense that they challenge many of our cherished beliefs about the role of *rational* behavior in human affairs. In particular, they challenge the thesis that the rational mind enhances the quality of human existence.

It would not be too difficult to state a parsimonious set of universally accepted propositions about the cognitive and affective states of human beings and then to show that what is distinctly human about the human mind is its capacity to become conscious of its own consciousness. (Spearman, 1923). Thus not only can we, with some effort, look into ourselves and see how certain affective states take possession of our consciousness but, also, we can develop the ability to "project upon our awareness the constructs of rational intelligence and, in so doing, to enhance the subtlety and quality of that awareness." (Robinson, 1970). Therefore, it seems that the fullest development of the affective life rests on the fullest development of the cognitive. And yet Western education with it heavy and almost sole emphasis on cognitive development of man appears to have failed. Many reasons may be put forward for this. But the most plausible, Robinson argues, seems to be that the notion of rationality has not been tried in sufficient depth.

Crucial Educational Issues and Teacher Education

The second position, dealing with teacher education, follows directly from the "crises" described under the first position. It also stems from criticisms about our schools, or rather, from an analysis of what tasks the schools should undertake. The major issue, although it is seldom put this way, is whether the schools in their present form can perform their tasks as efficiently and effectively as the different sections of the community demand. The tasks assigned to the schools, as well as the larger problems associated with raising the level of the national pool of abilities, require clearer definitions of teaching; they also require sharper distinctions between teaching and non-teaching activities; and they require above all a set of technical tools. The problem of teacher education is principally the relationship between theory and practice; it is not so much a question of imitating the best teachers, as was the case formerly, but of mastering empirical, scientific models and tools which must be *understood* and practiced by the teacher candidate.

Teacher preparation should be concerned with assisting teacher candidates to acquire these technical tools. It is a major exercise to set out in detail these tools. First, the exercise requires beforehand both the definitions of teaching and the ordered set of activities that range from the "teaching" to "non-teaching" category. Second, the development of the definitions and distinctions should be a cooperative effort of the entire school system, especially the practicing teachers. Third, the set of tools is best defined within a natural school situation where innovation, cooperation, and scholarship are bywords. What we are clearly rejecting as a teacher-preparation model unsuitable for the tasks facing today's schools is the apprenticeship model and its refinements. We reject as unsuitable the pupil-teacher system, the teaching practice system, the internship programs, and all systems that set up existing schools and teachers as exemplars of the ends and means of education.

What is needed is a teacher-preparation model that allows the teacher candidate

(a) to participate in creating new institutions;

(b) to join with his colleagues to identify objectives of school, the curriculum, etc.;

(c) to *create* and *test* original solutions to teaching problems;

(d) to make instructional decisions based on advanced knowledge of curriculum materials;
(e) to cooperate with his colleagues to build new curriculum materials;
(f) to master a range of teaching strategies derived from different views of learning and be able to use them;
(g) to study in depth at least one discipline until he understands the structure of that discipline;
(h) to know how to relate knowledge to the lives of children.

Under these guidelines, a teacher-preparation model would contain four main components:

1. Critical study of existing schools, teachers, pupils.
2. Working, alongside existing schools, on certain problems which might arise from the study of the schools.
3. (a) Mastery and use of certain teaching strategies which represent different viewpoints of learning.
   (b) Defining, constructing, and practicing certain elements of teaching strategies.
4. Working in innovative schools which have been especially designed to find solutions to special problems of the community.

Teacher preparation is a creative enterprise to be done with imagination and verve. It is the vanguard of the nation's welfare. Its neglect, however slight, has serious and long term repercussions on the economic, social and emotional welfare of a nation. Data will now be presented to illustrate some of the points and issues raised.

Caribbean Responses to Educational Problems

An analysis of the national budgets on education throughout the area shows this disheartening paradox: *At those levels where the basic mental structures are formed, the public support for education is very meager.* For example, three territories make token grants to pre-school education; another, after a set of favorable incidents sparked by research and development activities of the U.W.I., has allocated some money from the national budget for pre-school education. A similar set of favorable circumstances was not enough to motivate yet another territory to act. Data from four territories show that the expenditure from public funds follows the following pattern:

pre-school education	- no public support
primary education	- much public support but very inadequate when calculated per pupil
secondary education	- fair public support but very substantial when calculated per pupil and compared with primary pupil
further education	- fair public support

In one territory during 1970, while the cost per pupil in the secondary schools was $300, in primary schools it was $80, and in nursery schools no public funds were used.

There are however, some comforting glimpses. In Jamaica, the Basic Schools Program, supported by grants from the Van Leer Foundation, is being developed and researched at the Institute of Education, U.W.I. The program has provided useful information on some fundamental issues. It seems to me that the Basic Schools Program, through its organization and methodology, is furnishing useful insights, within the Jamaican context, for raising the abilities of pre-school children, and making good use of the national pool of intelligence, whatever the standard or sophistication.

In Barbados, the Community College project, generously funded by the Government of Barbados, sets out "to provide courses for the development of student's academic, vocational, or avocational skills by making him more aware of the world around him." (Best, 1971). Without attempting to discuss the hypotheses under which the project has been set up, it may be unambiguously classified as an example of raising the cognitive levels of a nation. In Guyana, an imaginative program for producing teachers for the early grades in primary schools used as a principal admission requirement the fact that the teacher-candidate was a mother. This program seems to be a good example of making optimal use of the national pool of intelligence. Unfortunately, the insights from the experiment are being lost owing to the unavailability of expertise to research and document the activities.

In St. Lucia, a mathematics project under the guidance of the Institute of Education and with the complete support of the Government of St. Lucia accepted as one of its major goals the development and raising of the mathematical abilities within the national pool. The strategies of the St. Lucia Mathematics Project are compelling and promising. They seem to produce supporting evidence not only about the possibility of significantly raising the national pool of abilities, but also about teacher-education and training.

Also in St. Lucia, the preparation of teachers for junior secondary schools employs a model that allows the teacher-candidate to participate in creating new institutions, to create and test original solutions to teaching problems, and to study in depth at least one discipline until he understands the structure. Fortuitous circumstances have combined to produce the imaginative model of St. Lucia, chief of which were the scarce resources and an innovative climate. A major criticism of this model is that it contains neither a monitoring device nor a quality-control system, nor even simple feedback techniques.

In Guyana, the preparation of teachers for senior secondary schools is carried out within a framework that allows the teacher-candidate to cooperate with his colleagues to build new curriculum materials, to study in depth at least one discipline until he understands the structure of that discipline, and to make instructional decisions based on advanced knowledge of curriculum materials. All this is good and augurs well for the construction of a model of teacher preparation which emphasizes institution building and creating new practices. However, the Guyana project has some weaknesses. Unwittingly it emphasizes, albeit to a small extent, the apprenticeship model. Like the St. Lucia project, it contains no evaluation machinery.

In St. Kitts-Nevis-Anguilla, teacher preparation employs a model which contains aspects of the St. Lucia model and the Guyana model. It provides opportunity for the teacher-candidate to join with his colleagues to identify objectives of schools, curriculum, and so forth; to know how to relate knowledge to the lives of children, and to master some teaching strategies. The methodology of this model is heavily committed to the apprenticeship system. Although some explicit objectives seem to be directed towards innovation and originality, its activities are trammelled by its very operations. Like the St. Lucia and Guyana models, its usefulness for model building is severely limited through lack of evaluation procedures.

Summary

World crises in education were projected in this paper into a two-dimensional space; one dimension was associated with educational activities directed towards raising the cognitive levels and the other with teacher education designed to equip teachers to participate in creating new practices. This allowed us to investigate certain relationships that helped to define the tasks that educational programs (in particular, schools) should undertake, and the technical expertise those who work in schools (especially teachers) should possess in order for them to participate in creating, building, as well as maintaining educational institutions.

Data were produced to show that some activities scattered over the Caribbean territories had significant loadings on the two dimensions. Thus, it was reasonable to infer that the thinking and action of some decision-makers in education in the Caribbean territories were directed towards finding imaginative and creative solutions for world crises. However, the paucity of good programs, and the weaknesses in many of them, have been also suggested.

One major weakness that looms in all these programs is the lack of proper evaluative research components. Some of these programs lack even simple monitoring devices and feedback procedures. It seems that the new programs, characterized by trial-and-error and by an absence of relevant theoretical bases, require careful evaluation research at every stage, not only to determine success or failure but also to identify and lay bare the key variables.

Notes

Bereiter, C. and Engelmann, S. (1966). *Teaching disadvantaged children in the preschool.* Englewood Cliffs, N.J.: Prentice-Hall.

Bernstein, B. (1960). "Language and social class," *British Journal of Sociology,* xi, 271-276.

Best, C. (1971). Educational Activity in the Caribbean. Paper read at seminar on Educational Developments in the Caribbean, held in Antigua. *The Advocate-News*, Barbados. Saturday, July 24.

Brison, D. (1966). Acceleration of conservation or substance, *Journal of Genetic Psychology*, 109, 311-322.

Dienes, Z.P. (1960). *Building up Mathematics.* London: Hutchinson Educational Ltd.

Dodwell, P.C. (1960). Children's understanding of number and related concepts. *Canadian Journal of Psychology*, 14, 191-205.

Dodwell, P.C. (1961). Children's understanding of number concepts. *Canadian Journal of Psychology*, 15, 29-31.

Ezell, M., Hammerman, A., and Morse, S. (1969). 'Letter to the Editor,' *Young Children*, 24, 310-312.

Flavell, J. (1963) *The development psychology of Jean Piaget.* Toronto: Van Nostrand.

Greco, P. (1969). "Learning and intellectual structures." In P. Eraisse and J. Piaget (Eds.) *Experimental psychology: Its scope and method.* Vol. 7. New York: Basic Books.

Hood, H.B. (1962). 'An experimental study of Piaget's theories of the development of number in children.' *British Journal of Psychology*, 53, 273-286.

Hyde, D.M. (1959). 'An investigation of Piaget's theories of the development of the concept of number.' Unpublished Ph.D. Thesis: University of London.

Inhelder, B. and Sinclair, H. (1969) "Learning cognitive structures." In P.H. Mussen, J. Langer, and M. Carrington (Eds.), Trends and issues in developmental psychology. New York: Holt, Rinehart, and Winston, pp 2-21.

Kamii, C. (1969). Some implications of Piaget's theory for the Kindergarten curriculum: Preparing preschool children for the acquisition of elementary number concepts. *In Kindergarten curriculum - A forward look.* Cambridge, Mass.

Kamii, Constance (1970). Piaget's theory and specific instruction: A response to Bereiter and Kohlberg. *Interchange.* 1, 33-39.

Kohlberg, L. (1968). Early education, a cognitive developmental view. *Child Development*, 39, 1013-1062.

Piaget, J. (1950). *The psychology of intelligence.* London: Routledge and Kegan Paul.

Piaget, J. (1952). *The child's conception of number.* London: Routledge and Kegan Paul

Piaget, J. (1953). *The origins of intelligence in the child.* London: Routledge and Kegan Paul.

Piaget, J. (1955). *The child's construction of reality.* London: Routledge and Kegan Paul.

Robinson, F. (1970). "Some relevance for the school." In Wees, W.R. (Ed.), *Teacher Education: A search for new relationships.*

Schmalour, E. (1970). The possibilities and limitations of an early advancement of the cognitive faculties. *Education*, Vol. 2, 114-134.

Spearman, C. (1923). The nature of intelligence and the principles of cognition. *British Journal of Psychology*, Vol. xxix, 1928-29.

Wallach, L. and Sprott, R.L. (1964). 'Inducing number conservation in children.' *Child Development*, 35, 1057-1072.

Williams, A.A. (1958). "Number readiness." *Educational Review*, 11, 31-45.

Vygotsky, L. (1962). *Thought and language.* New York: John Wiley - Technology Press.

THE ROLE OF THE TEACHER EDUCATOR IN THE DEVELOPING NATION

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In most developing countries, and certainly in the English-speaking Caribbean, acute demographic problems - the sheer weight of numbers - is perhaps the most overwhelming factor in the general educational crisis. To this must be added the multifarious, heavy and additional demands that independence makes upon the manpower of a new nation, including the almost completely unchallenged idea that a few years' formal schooling for all holds the solution to the national need for satisfactory skills, attitudes and values. Furthermore, when one refers to an educational system, one thinks of a carefully articulated, integrated and relevant series of educational opportunities and undertakings. One questions if any newly independent country inherited such a system. Certainly few, if any, would claim to have arrived at this state today.

The question of how to meet each problem, each demand, and how to integrate each effort within the whole calls for insight and creativity, originality and skill. Projects and experiments that are attractively successful in one context are often by the very reason of their success in that context unsuited for another. Even areas as apparently similar as the islands of the English-speaking Caribbean have within their separate island societies nuances, and even significant differences, that make independent local approaches a matter of first importance.

Historically, in those areas of the Caribbean where teacher education institutions have existed longest, these institutions have in fact served a dual purpose. At a time when educational opportunities were available to comparatively few children, when schooling was avowedly academic in its intention, and scholastic success was clearly a social elevator, the teacher education institutions were themselves largely academic in emphasis in conscious, or unconscious, support of the intention of the schools. Moreover, a fair proportion of students, then as now, deliberately or otherwise, used the Teachers' College to further their general education, and soon branched off into other fields of service.

In one respect, this movement from the classroom was inevitable. The initial selection of students for teacher preparation has been notoriously unreliable, while the demands and disciplines of teacher education and the teaching profession have consistently made the aspirants for teaching self-selecting. Nor can those who left be unreservedly classified under the dreadful heading of "wastage." Further education when used in another field of service cannot be regarded as having been lost to the society. In our service oriented economy it is exactly those interpersonal skills and communication talents possessed by a good teacher that are most in demand in other sectors of the economy. Teacher educators need to recognize that this subsidiary advantage to the nation, which seems to reflect adversely on the ability of the colleges to prepare teachers with staying power in the profession, will always be with them. On the other hand, there is today an increasing number of agencies committed to preparing workers for other fields, which may help.

Teacher educators also need to play a positive and active part in helping to arrange and define the educational priorities of a nation. The thousands of children now pouring into schools from completely illiterate homes, and destined to live on into the twenty-first century, need radically new approaches and skills. Teacher educators need to be sufficiently discerning and capable so that they can insist on worthwhile and manageable goals for their students in the time at their disposal. They should always be the persons most knowledgeable about the young teachers at the time of their entry into the profession. It is their responsibility to see that their students are as well prepared as possible, and their evaluation of them as reliable and realistic as one can reasonably expect.

The participation in arranging and defining priorities must also result in real influence on the curriculum of the schools. Most people know so well all the attractive and convincing arguments for widening, enriching and diversifying the curriculum of, for

example, the primary school, that it almost seems like heresy to challange them. Yet circumstances in some areas unquestionably justify consideration of the idea of the primary teacher as a class teacher be abandoned, or that the programs of the schools be reorganized to meet the capabilities of those who come into teaching.

Where there is no real correspondence between what a teacher can do and what she is asked to do on the job, one of three situations result, all of them unsatisfactory. At best, nothing happens. At second best, she leaves the profession. But perhaps, most distressingly, she stays on in the classroom frustrating herself and the children and completely unfitting them for the task of further continuous learning with which they will have to cope for the rest of their lives. Benjamin Bloom asserts:

> We may express our concern for the intellectual and personality consequences of a lack of clear success in the learning tasks of the school. Increasingly, learning throughout life (continuing learning) will be necessary for the largest proportion of the work force. If school learning is regarded as frustrating by a sizeable proportion of students, then little can be done at later levels to kindle genuine interest in further learning.[1]

One facet of the teacher educator's role, then, is leadership and influence in the planning of all aspects of the educational program. Another aspect of this role is prime responsibility for the quality of the programs entrusted to each institution. Here one would interject two pleas: one, for less fragmentation of effort in the preparing of teachers to work with different age-groups, and two, for a positive program of preparation for people who might teach outside the formal school system in adult education, industry, government and so on. Much that is essential in modern education will have to be handed over to these persons.

The new efforts in Caribbean education must re-interpret the term "quality in education." It can no longer be merely equated with academic mastery. It has to embrace all meaningful and relevant preparation for service in one's society. Naturally, this will include preparation for academic and professional leadership; but it must also be based on a concern for an education more related to environment, to national cultural tradition, and to economic and educational needs at the lower and middle level of society. It has proved hard to translate this new approach into practice, whether in syllabus or structure. For one thing, the association of education with superior employment has had time to be deeply engrained in the minds of parents and pupils alike. For another, many would-be teachers in the region today make their first acquaintance with this concept, this approach, this stimulation, during the all too brief years of their pre-service preparation. Others who teach have not had even this.

This bring me to the final aspect of the role of teacher education in this area. The constraints of time, numbers and money make it imperative that those involved give serious thought to taking certain programs of teacher preparation out of the established institutions and directly into the field; that a conscientious attempt be made to prepare teachers on the job, for the job. There is a real possibility that the answers to some of our most distressing problems lie in departures and experiments such as this.

The Caribbean area, newly independent, pressured by burgeoning populations, urban problems, and agricultural and industrial crises, is caught up in today's world of breathtaking scientific and technological discoveries and insiduously distressing moral dilemmas. This area needs, above all, teachers who have some vision of, and concern for, the behavioral outcomes they wish to achieve; teachers who have overcome their own problems of communication; teachers who can think and approach the social, economic and technological problems of their milieu in a positive, constructive way; teachers who consciously have some practical experience - not just a vague idea - of how these learnings and skills might be developed in young children; and teachers whose youthful enthusiasm and fervor is enhanced by their own job success so as to create commitment and zest in the children entrusted to their care. This quality of person can only be achieved by quality preparation, by significant, stimulating, reinforced experiences. It calls for real soul searching, for a reappraisal of what is truly fundamental and inescapable in the teacher development exercise and what is expendable.

Notes

[1] Benjamin S. Bloom, *Learning for Mastery*, Chicago, 1965.

THE CRISIS IN VALUES

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With respect to education in the Caribbean, the crisis to which I wish to draw attention is only partly a crisis concerned with numbers of school places, with the increasing population, with the undesirable physical conditions in which formal education is carried on, and with the conformist, repetitive, spirit-destroying practices of most schools. I have something else in mind: the crisis connected with self-confidence, with honesty, with creativity. Our greatest crisis in education, and in teacher preparation, in most parts of the "English" Caribbean is in the field of values. It involves the prevalence of self-deception and dishonesty, of an almost complete lack of confidence in our own brain power and abilities; and in the continuation of structures which punish creativity, and reward middle of the road (which means, of course, well to the right), "buttering up" and sycophancy.

In a more general sense the crisis in the non-industrial, poorer countries is concerned with at least two matters. First, there is the almost magical - not religious - belief in *school* education. So many parents, planners and businessmen, and even people in education, seem to think that written on every school building should be "Hope *for all success* - spiritual and moral and financial - all you who enter here!"

Second, the richer countries undoubtedly get richer, and even if the poor countries do not get poorer, at least the gap between them and the richer countries continues to widen. Since there is immediate communication in the modern world, the poorer countries know what is available in the richer countries, and they unfortunately at times think that they can only have a reason for existence, and human dignity, if they manage to imitate the richer countries, not through human principles soundly understood, but by the taking over of *end products*. The fact that these end products have been achieved at great human cost, and often no longer serve any useful human purpose, is often ignored by, or more accurately, unknown to, the repeaters and imitators from poorer countries, who sometimes do not understand the social origins, or technical significance, of what they so avidly desire for their own educational systems.

Whatever is received is always received according to the capacity of those receiving!

The Crisis of Confidence

We readily accept the view from temperate climes that we are somehow "exotic," somehow we are happy, happy, happy. And yet there is no advisor or consultant from abroad who, while telling us how happy we are and what sunny natures we possess, will not immediately advise us to become "developed" and join the rat race.

Do *they* have it. We want it. Do they want comprehensive schools in England, then so do we. Do they want Junior Secondary Schools in the United States, then so do we. Do they use *internship* (a term with a *different* meaning in Medicine)* programs in the United States in teacher education, then so do we. You see, I, Saul, am as great as all those circumcised, well developed characters! Paul of Tarsus had the good sense to add quickly, when he spoke in this way, that he was speaking foolishly.

The practice of repetition or repetitive imitation is often an essay in fantasy in pursuit of the pleasure principle. Usually one repeats what one has found pleasant and rewarding. But we continue repeating what others no longer find rewarding, and what we have never enjoyed. Repetition rather than reality; we, like most human beings, prefer as little reality as possible. Some of the obvious instances of repetition deserve mention:

(a) *Research:* The University of the West Indies started a Department of Education without giving it any means of doing research. Obviously, what had been done elsewhere before needed only to be repeated.

(b) *Student/Staff Ratio and Staff Overload:* The University of the West Indies took over from the English universities the notion of deciding the number of staff, and

*Internship in medicine comes after many years of basic preparation, often after the equivalent of *two* bachelor degrees. In education, it is apparently to take the place, in the West Indies at least, of one year of pre-degree work.

therefore to a great extent the finance of the university, by using a staff/student ratio. In the midst of some financial discussions on one occasion, it was decided that the ratio should no longer be one to eight, but should be one to ten. Some time after when a study of the workload of members of staff was being done, it was discovered that in one department the average workload, with respect to teaching, was sixteen and a half contact hours per week. It was agreed that this was much too heavy; the rest of the university averaged between eight and ten contact hours. Rational procedures would have called for a complete re-examination of the situation, including the whole question of whether the staff/student ratio was the best measure of financing the university and including whether a one to ten ratio was sensible and workable. But in accordance with the principle of repetition, the question of the staff/student ratio was not looked at. In fact there was a strong refusal to examine it.

(c) *Organization of Schooling:* In much the same way, we insist on continuing to believe that how we have previously organized schools should be repeated and repeated and repeated. So apparently an institution which does not function from eight in the morning until three in the afternoon five days a week for three terms (or two semesters) cannot be a school. Would it not be possible to have an institution promoting the education of the youth which started at one in the afternoon and continued until six in the evening? Would it not be possible to have children going to school part of the week for ten weeks, and all of the week for the rest of the time? And if some people react violently to the idea of de-schooling it may often be because we simply wish to repeat patterns which we know well. By the same token we cannot afford to take over ideas on de-schooling simply in order to repeat what other people are saying and doing.

(d) *Industrial Forms:* Professor Lauwerys, in his most interesting paper, seemed to assume that what was a "successful" industrial form used in the creation and distribution of goods must be repeated. In using the ideas from industry, as a sort of touchstone for our work, it does seem to me that we are making the unwarranted assumption that the only form of industrial civilization which could work and could be productive is the form which we know at present. But this is palpably not true. We must be careful in thinking of the "success" of industrial procedures to inquire whether those were the only ones which could have been successful, whether they must be repeated, and whether they offer us the best norms for the humane and efficient organization of the education systems which must be devised by us.

The Crisis of Honesty

The crisis with respect to honesty is not unconnected with the pressure of places, the pressure of buildings, and the shortage of teachers. I refer to a refusal of those *who know* to accept, and to state, what the situation really is. And I refer to those who could know, and who refuse to see what is right in front of them.

Two examples will suffice. One is the refusal to accept solid research findings such as those of Philip Vernon and others with respect to the literacy and numeracy of Jamaicans, male, aged eleven. A second example is that of the question of the level of entry to teachers' colleges in Jamaica. I should mention a third, the attitude to the inservice preparation of teachers in Barbados. This last one is particularly interesting because those who are advocating solely "on the job" preparation in Barbados are simply refusing to look at the consequences for the liquidation of the backlog which they *say* is their aim. You cannot in a reasonable period of time liquidate a backlog of any size solely by inservice training, if all the while you are letting in new people without any kind of (pre)service training!

In all these three cases, the crisis is not mainly in the facts of the situation. It is not only that one-third of the eleven year olds are virtually illiterate; it is not only that people have to be accepted for teacher preparation before they are, ideally or otherwise, ready for that preparation; it is not only that there is a backlog of teachers who need preparation. But it is very much the dishonesty with which these situations are faced. There is an attempt not to admit what the situation really is; particularly, there is a dishonest attempt not to accept that certain consequences necessarily flow from the acceptance of certain solutions to the three situations mentioned above. The crisis is not that we have to accept people below certain educational standards to which we used to hold. But the crisis, and it is both a moral and a technical one, lies in the fact that we refuse to admit this, that we pretend that the people whom we are taking in are at a

standard which they do not achieve. Further, because we are being dishonest, we fail to make the systematic and effective adjustments which should be made.

When your father asks for bread don't give him stone. But if you decide to give him stone, why fool yourself?

Honesty and self-confidence go together in an odd sort of way. If one does not honestly look at a problem, if in a way one does not wish to *solve* a problem, but simply that the problem should disappear, then no honest commitment is called for. On the other hand, without self-confidence, it is extremely difficult to be honest about the really great problems which face us. Without confidence we must lapse into fantasy. I do not know all the reasons for it, but I am willing to state openly that I have often felt that one of the greatest products of our education system today has been in fact a general overall feeling of incompetence, a general lack of confidence and self-confidence.

Further, teachers and teacher educators cannot have the confidence which they need for their work if we continue the trend of telling them that their work "can't do a thing," that the people whom they are dealing with are already determined by their environment to come out in a certain way. If we accept this determinism, according to class or color or money or geographical origin, or, be it noted, *national citizenship*, if this determinism is true, then schools and teachers' colleges are a waste of time, not by accident nor by negligence, but by inexorable, determined laws, and we might as well abandon them. I regret, incidentally, that we are about to repeat that kind of research which tries to show that people from a certain group must "advance" in a certain way. It is no longer, as Dante said of Hell, "abandon hope all you who enter here," but rather "you have abandoned hope all you who entered into human existence in certain socio-economic circumstances."

The Crisis and Creativity

Let us among other things develop a real feeling for connoisseurship. It is not only that connoisseurship is a good way of judging, it is also that in developing it we develop a real interest in, say, teaching and teacher education. Knowledge can be rational, but it is more than that; very few people, if any, can learn to teach, or learn to learn, purely from a book of rules.

If you are in the business you know a good hurdler, Diaz of Cuba. Or a good diver. You would only have to see George Headley make two shots to know that he was a great batsman; the same is true of Bradman, or Sardesai. One pitch from Koufax would have been enough. Any afficionado of any sport knows this. But then afficionados of sport are willing to watch many players, to try a bit themselves, to experience, to be taken up with, to discuss, to argue, to go great distances to see and to judge and to play. Among teachers, and teacher preparers, we have to develop this second nature feeling for good quality, and for the conditions that help it to grow. One has to learn that one is dealing with knowledge through acquaintance, not with information by hearsay.

Some creative things have been done. Of course these things have had to overcome the cruel reactionary people, old and young, who hate anything they have not seen before, and who hate anything they don't think they could handle.

In the U.W.I. Department of Education, in the Diploma course, the method and notion of group teaching practice has been developed and regularly used. A group of about eight or ten students, together with a tutor or two, take over a part of the work in one of the subjects taught in a school. The group plans together just what is to be done. They discuss aims and procedures and expected results. They decide who in the group will be responsible for the teaching; whether it should be one or two persons, whether staff or students. The lesson is then taken with the regular class in the school, in the presence of the group. Those who watch know what has been expected to happen in the class, and what outcomes were expected. They also know what procedures were promised, with what expected results. The planned projection can be measured against the actual performance.

But, just as important, all are becoming acquainted with what moves have to be made in the game, and particularly with what moves are useful, fruitful, elegant, economic, awkward, forwarding or interruptive. That which when seen pleases, is the beautiful; but it is also the satisfying, the intrinsically rewarding, and no man is likely to continue long with any spirit or verve in an activity which he does not experience to some extent as rewarding. The group is always, all the time, being encouraged to take part in, to become acquainted with (as well as to rationalize about) teaching and good

teaching and creative teaching. They are becoming artists in teaching, as well as connoisseurs of learning and teaching. By being together they not only help each other in the group, but they are in a better position to comment on each other's work as they have been together from the very planning stages, from the very time at which objectives, assumptions and procedures were discussed, not in general, but with respect to a task which is the responsibility of the whole group.

This group teaching practice is one creative means which has been worked out by the Department partly in response to a situation in which few schools have large numbers of well trained creative teachers working in them. As a result, the group brings into the situation the means by which to develop a creative proficiency as well as a deep awareness and acquaintanceship with what creative learning and creative teaching really feel like. There is a texture and a rhythm to be experienced; and rule books and schemata and models just can't take the place of warm intuitive alert experience gained in a human and social situation.

Some of the other creative developments can only be mentioned here:

(a) the old Moneague experiment of taking well experienced teachers (who had little training) and providing them with a special type of training, and examining them in a certain kind of way.

(b) the B.Ed. (Dept. of Ed.) U.W.I., which differs from the regular first degree in education, and which was designed to meet special West Indian conditions. The creativity of this program has been in its teaching method, which is heavily based on research done by the candidates, and in its mode of examining which is by a solid study written by each candidate and based on his research. The candidates do some lecture courses and they do some work on the teaching of a subject. But they are given no examination papers in these subjects, although they have to write essays. They are expected to, and on the whole they do, relate their lecture courses to their research, and to the writing of their studies. This has been most rewarding work, and some of the studies produced by the candidates will soon be published. The candidates are required to have had First Training in teaching before doing the course which is a two-year course. They also have to be people of solid experience and good intellectual abilities.

(c) note also the activities mentioned by Desmond Broomes in his paper. And also the formation, under the stimulation of Sir Philip Sherlock and Don Jaime Benitez, of the Caribbean Association of Universities and Research Institutes. This association should be able to bring together resources and brain power for the region to stimulate relevant and productive activities in the face of the crisis.

Reconciliation in Education

In this paper, I have attempted to treat the current crisis from the perspective of attitudes and values. We need to encourage hope, especially in teachers. If some feel their task is impossible, they should not be called upon to do it; if it is possible, but difficult, they must be helped to do it.

But such help must be based on honesty and love, an openness of spirit. Only from these attitudes can self-confidence come. We must strive for reconciliation rather than confrontation. According to Eliot, only education can lead to a reconciliation of the active and the contemplative. We must seek to reconcile the rationalist, rule-directed methods of learning and teaching with involvement, love, work, connoisseurship - the ability to tell by the feel of the jade in the hand whether it be genuine or not, and the courage to say honestly which it is.

In sum, we need a reconciliation of analysis, action and insight; of the contemplative and the pragmatic; of involvement and detachment - all illustrated so well by that wonderful story *Moby Dick*, especially where the author describes the whale's skeleton and comments on it as it rests in a green section of the forest. He pores over the skeleton in a most interesting way. But in the end, he has this to say:

> How vain and foolish, then, thought I, for timid untravelled man to try to comprehend aright this wondrous whale, by merely poring over his dead attenuated skeleton, stretched in this peaceful wood. No. Only in the heart of quickest perils, only when within the eddyings of his angry flukes; only on the profound unbounded sea, can the full invested whale be truly and livingly found out.

Improvement of Teacher Education: Challenge of the Seventies

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In order to focus attention on the challenges to teacher education in the decade of the seventies, it is necessary to look back on the past and assess the contribution which education has made to the development of the world and the realization of human ideals. It is also necessary to analyze in some measure the present social situation against the background of our inherited human values. It is only within this framework that we can attempt to chart our directions for the future, and project the role of education in this enterprise. When we have considered this, we can see what sort of teachers we shall need, how many, and how best to prepare them.

One of the most striking lines of development in human history has been the emergence of the "common man." The ideal of the worth of each human individual, which was implicit in the thinking of early philosophers and is explicit in the teachings of many of the world religions, but which was largely ignored in the centuries since its first formulation, has become more of a reality in the last century or two. The serfs or peons or helots have come to be regarded as people, worthy of concern and not merely as units existing for the benefit of some great man. The condition of slavery, which blatently violated this concept, has finally been outlawed.

With the realization of the humanity of the common man has come an appreciation of his rights: his right to an equitable share of the world's wealth, his right to protection from injustice and oppression and his right to more fully enter into and enjoy the cultural legacy of the past. And with this has come, as both a cause and effect, a recognition by himself of his own powers. Thus, by collective action he has asserted his right to withhold his labor to bargain for adequate wages. We see the beginning even of the statement of his right to determine whether or not he should fight in the wars contracted by his government. We see that peoples previously discriminated against are no longer willing to accept this as a situation ordained by God, but are willing to assert their rights to equal treatment by society.

To what degree has education contributed to this development? Or has it merely responded to it? Clearly, it has done both. Ideas, such as the worth of every man, are only effective when they have been seized by a sufficient number of persons. The development of printing increased the availability of the ideas, but it was not until there were enough people able to read that the ideas were disseminated widely enough to demonstrate their strength. And, as it came to be accepted that all people have a right of access to these ideas, the demand for the skills of reading and writing resulted in efforts toward universal education. Even where this is far from being achieved, the right has been conceded, and now is enshrined in the Universal Declaration of Human Rights.

Now the demand for popular education brought into being the professional teacher. This, in turn, called for the creation of an institution for the preparation of teachers, which has been known by various names in different countries, but which is referred to in the English speaking world as Colleges of Teacher Education, or Teachers' Colleges. By and large, in developed countries, colleges have produced a sufficiency of teachers to bring education to most of the people; in developing countries they are, in most cases, still far short of this goal. But in almost all countries they are firmly a part of the educational system.

In many countries they suffer from certain handicaps. For instance, a tradition of cheapness has settled on them, stemming from the fact, probably, that they were created to satisfy the needs of the common man, before he had fully come into his own. Their ways of doing things have tended to become calcified, thus making change more difficult. In some cases their philosophy of purpose has not been regularly reviewed, and hence their operation has tended to become mechanical and irrelevant. In part, this is why they have contributed to the problems of the present, many of which have reached crisis proportions.

Of these crises, the most stupendous and most pressing would seem to be the poverty and hunger throughout the world. It is sometimes difficult for those of us who live in the midst of plenty to appreciate fully the suffering and the degradation of spirit that comes from poverty. The horror and the stupidity of it is heightened by the

realization that it need not be. There is enough wealth produced in the world today to relieve the areas of dire poverty, if only it could be more equitably distributed. The advances of science and technology have put it within our power to eliminate it altogether and to bestow bounties on all. To do this it would seem necessary to blunt the lines of national states, and to put the world's produce and the skills of the world's people at the service of all the people of the world, irrespective of the nation to which they belong. Thus we would not have the ludicrous spectacle of, in one place, bursting barns and farmers being paid not to produce food, while in another place there is widespread starvation.

How does this become a concern of teacher education? First, if it is true that we need to make available the resources of the world to all peoples, then the direction in education should be towards the appreciation of a common humanity which transcends national boundaries. An American, for instance, should feel more oneness with and responsibility for, a Scandinavian or an Indian or a Nigerian, because he is a fellow human being, than he should feel loyalty to a national state. Even within any one country, the common good and the satisfaction of human needs should supercede private profit and individual affluence. This is a hard doctrine and not likely to be popular with the upper classes, but it seems to be necessary if the world's people are to live at any reasonable standard. For the decade of the seventies, then, teacher education should direct more emphasis on the rights of the individual human being, irrespective of where he lives, so as to develop a form of international education that will bring a warm and full appreciation of other peoples and other national groups.

The second problem or crisis area concerns the question of racial disharmony. This is nothing new. Throughout recorded history people have been enslaved, people have been conquered and forced to accept a subordinate status, people have been discriminated against in one way or another. Recent history has brought the Negro and other people labelled as "non-white" into a position of subservience. The doctrines of racial inferiority and superiority have continued to poison relations and produce negative attitudes. In many areas of the world the ordinary social intercourse of life has been embittered and much tragedy and pain have resulted.

Resistance to racial discrimination must be actively encouraged and nurtured by the forces of education, and thus should be an ingredient of the teacher education program. Wherever the training of teachers occurs, it should have the aim of leading all young people of all races to an appreciation of the sanctity of another personality, and of the interdependence of all people. Theories of racial superiority must be examined and exposed in all their lack of validity.

The alienation of youth has become a frightening problem in many countries of today's world. The addiction to drugs in many countries seems to be on the increase. Young people's protest groups are fashionable, and have become mixed with drugs and weird behavior. Whatever the form, the abdication of many young people from the expected roles has brought sorrow to families and disappointment to teachers.

This seems to me a problem of growing proportions and one to which education in general and teacher education in particular should turn its attention. Since the young people in most training institutions are of a similar age to the protesters, and may even in a certain measure be in sympathy with them, they are in the best position to help us to deal with this problem. We have to listen to them. We have to find out what is driving them towards this behavior, and we have to work out with them a way to heal this frightening breach in our society.

There are many other problems of lesser magnitude threatening our society and poisoning human relationships today. There are for instance the problems springing from the growing urbanization in many countries. As cities become larger the problems of housing, crime control, transportation, garbage disposal and a host of others, multiply. Again, there are the problems of the pollution of the environment. In trying to get rid of the waste products resulting from living together, we poison our seas and rivers and our atmosphere; we disfigure, and we tend to destroy the very life-giving elements themselves. Then there are the problems associated with the spending of leisure time. This is obviously more a problem of the developed rather than the underdeveloped countries. But as technology gives us the power to produce more and more goods with less physical effort, as workers by their combined action are able to demand a shorter week, they find themselves with time on their hands and no clear guide or preparation as to how to spend it. True, clubs concerned with physical sports of one sort or another, or with

cultural and artistic areas, or with political or intellectual activity, are on the increase. But these cater to a small minority. Many people are mere watchers, and very many more do neither.

All these problems, and many others not mentioned, must become a concern of the teacher educators. We must prepare teachers who will be sensitive to the present problems of their world and who will lead the society, in part through the children they teach, towards a solution of these problems. What then are the main challenges facing teacher education in the decade of the 1970's?

This decade is going to see an acceleration in the fulfillment of the ideal of the common man. Human beings of varying races, of both sexes, of all ages, in all socio-economic classes, and in all countries, will increasingly and more effectively assert their claims to just treatment by society. This will increasingly break down the walls of privilege and prejudice. We are going to see many other 'Lib' movements in addition to 'Women's Lib.'

This is a worthwhile goal. Teacher education should encourage it, should nuture it, and should prepare itself to respond to the many needs and challenges which flow from this. The responses will take varying forms, according to particular circumstances. Nevertheless, there are three main tasks to which we should address ourselves.

The first, and perhaps most important, is finding the means of bringing education to all the people. There are those who will interpret this in terms of getting enough teachers to stand before the children in the traditional classrooms. Others see this problem in terms of making use of the modern technologies, and hence needing to train fewer people, but ones who have acquired the skill of using these modern technical aids. Still others will seek more fundamental approaches, on the argument that the institutionalizing of the educative process has produced a system that is dull, irrelevant and unattractive, and unattainable by many countries. Whatever the interpretation, however, teacher education must set itself the task of removing the scourge of illiteracy from the earth, and of leading people towards a realization of their full potential. This means finding teachers to do the job.

The second challenge concerns the programs for training the new teachers. This is a complex problem, made up of many facets. It involves, for instance, a consideration of the main philosophical and social orientations of the training programs. Where should the main emphasis be? Should they be towards an appreciation of a common humanity among all peoples, or towards national bonds and national sovereignty? Should educational concerns in any country seek to emphasize common human interests over sectional interests? Should education seek specifically to examine problems of the environment and point the way to possible solutions? Should it seek to generate concerns for the poor and the dispossessed in other lands, or should it ignore them as remote? Then the problem also concerns an examination of, and a determination to discover all the effective *ways* of training teachers. I said earlier that because a procedure for preparing teachers had been evolved many years ago it has come to be regarded as the only way, or the best way of doing the job. But there may be many other ways waiting to be tested. Perhaps institutions of teacher education may be proved to be ineffective or unnecessary, as is being suggested in some quarters. Even if we retain the institution, we will want to question seriously the procedures and programs that have become accepted, hallowed by time and usage. Maybe we have not accepted freely enough the benefits that modern technology and research have placed at our disposal.

Finally, we need to examine continuously the philosophy which infuses our work. What values do we hold dear? What values would we wish our students to hold, and when they become teachers, to communicate to the children in their charge? We should hope that these values would be congruent with those enunciated by the world's religions, and which will help us to help our fellow men towards a richer, fuller life.

May I suggest in conclusion that much benefit can come from concerted action, from sharing experiences, and from learning from each other. The one organization that offers to educators an opportunity for doing this on a world scale is the International Council on Education for Teaching. It welcomes your support.

NEWS AND NOTES

For news of teacher education in India and Africa see pages 18 and 34.

THE 1971 WORLD ASSEMBLY

The 1971 World Assembly held in Kingston, Jamaica, August 7-9, attracted more than 200 participants from throughout the world to discuss the topic, "Crisis and Change in Teacher Education." Among the countries represented by speakers were the United States, United Kingdom, Uganda, Brazil, Argentina, Chile, Canada, Peru, Costa Rica, Paraguay, Venezuela, Jamaica, Barbados and Antigua. The substance of the addresses and discussions are provided in an edited form in this volume. A proposal to incorporate the Council was introduced in Jamaica to the membership and informally discussed. Formal action on this proposal will be taken by the membership during the Business Meeting of the London Assembly.

Generous assistance for the conference was made available by Unesco, WCOTP, The Jamaica Teachers Association, the University of the West Indies, the Organization of American States and the American Association of Colleges for Teacher Education. The Council is grateful for the support from these organizations and for the individual contributions of time and talent by Liliana Muhlman, Director of Educational Planning, Rio Negro Province, Argentina, Ileana Gianotti, Department of Regional Centers of Education, Ministry of Education and Culture, Asuncion, Paraguay, and many others who helped assure the success of the 1971 World Assembly.

Research and Publications

The Council has just completed a major document, produced in cooperation with Unesco, entitled *Innovative Teacher Education Programs.* This report contains 39 case studies of innovative programs from throughout the world with the majority obtained in the United States. The one-hundred page volume is available from the ICET Secretariat, in English or French, for $3 (U.S.).

In addition, ICET has cooperated with the American Association of Colleges for Teacher Education in a survey of the international dimension in teacher education in the United States. The results of this project will be available in late 1972.

The 1972 World Assembly

ICET will hold the 1972 World Assembly in the University of London, July 25-28. Based on the theme, "Challenge and Innovation in Teacher Education," this Assembly will emphasize the new and practical developments in such areas as the field experience component of teacher training, curricular organization, technology, in-service training, relationships among teacher education and other educational and social agencies, and teacher training programs for special fields such as vocational, environmental, multicultural and special education. Speakers and resource persons knowledgeable in these areas will be drawn from throughout the world, with particular emphasis on Europe. With the assistance of Unesco, experts in teacher education are already committed from the USSR, Poland, Italy, Yugoslavia, Czechoslovakia, Denmark, France, the German Federal Republic, Africa, Thailand, the United States, and the United Kingdom. Lord James of Rusholme, Vice-Chancellor of the University of York and principal author of the James Report on teacher training in the United Kingdom, will deliver the opening address.

This year's Assembly is expected to be an extremely significant one, not only because of the distinguished program planned but also because the structure and functions of the Council are to be reviewed and possibly revised. As the Executive Director indicates in his article on page 2, it is hoped that the Council will become more representative of and responsive to national teacher education organizations and educational developments in institutions. This proposed change, in addition to the election of Officers and Executive Committee Members and the proposal for incorporation, promises to make the conference extremely important to the future of ICET.

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